DOCUMENT RESUME

ED 094 474 EA 006 320

TITLE Effects of Energy Crisis on Education, 1974. Hearing Before the Subcommittee on Education of the Committee on Labor and Public Welfare, United States Senate. Ninety-third Congress, Second Session on Examination of Current Energy Crisis and the Effect It Will Have on the Education Offering of the Nation's Schools and Colleges.

INSTITUTION Congress of the U.S., Washington, D.C. Senate Committee on Labor and Public Welfare.

PUB DATE 7 Jan 74

NOTE 296p.

EDRS PRICE MF-$0.75 HC-$13.80 PLUS POSTAGE

DESCRIPTORS Curriculum Development; Educational Needs; Elementary Schools; *Energy; *Energy Conservation; Federal Government; *Financial Problems; *Fuel Consumption; Higher Education; School Conditions; Schools; Secondary Schools

ABSTRACT

Congressmen, federal administration spokesmen, education association representatives, and State and local officials offer their comments in these hearings on the effects of the energy crisis on the nation's education programs. (JF)

EFFECTS OF ENERGY CRISIS ON EDUCATION, 1974

ED 094474

HEARING

BEFORE THE

SUBCOMMITTEE ON EDUCATION

OF THE

COMMITTEE ON LABOR AND PUBLIC WELFARE UNITED STATES SENATE

NINETY-THIRD CONGRESS

SECOND SESSION

ON

EXAMINATION OF CURRENT ENERGY CRISIS AND THE EFFECT IT WILL HAVE ON THE EDUCATION OFFERING OF THE NATION'S SCHOOLS AND COLLEGES

JANUARY 7, 1974

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

EA 006 320

Printed for the use of the Committee on Labor and Public Welfare

U.S. GOVERNMENT PRINTING OFFICE

77-788 O WASHINGTON : 1974

COMMITTEE ON LABOR AND PUBLIC WELFARE

HARRISON A. WILLIAMS, Jr., New Jersey, *Chairman*

JENNINGS RANDOLPH, West Virginia
CLAIBORNE PELL, Rhode Island
EDWARD M. KENNEDY, Massachusetts
GAYLORD NELSON, Wisconsin
WALTER F. MONDALE, Minnesota
THOMAS F. EAGLETON, Missouri
ALAN CRANSTON, California
HAROLD E. HUGHES, Iowa
WILLIAM D. HATHAWAY, Maine

JACOB K. JAVITS, New York
PETER H. DOMINICK, Colorado
RICHARD S. SCHWEIKER, Pennsylvania
ROBERT TAFT, Jr., Ohio
J. GLENN BEALL, Jr., Maryland
ROBERT T. STAFFORD, Vermont

MARIO T. NOTO, *Staff Director*
ROBERT E. NAGLE, *General Counsel*
ROY H. MILLENSON, *Minority Staff Director*
EUGENE MITTELMAN, *Minority Counsel*

SUBCOMMITTEE ON EDUCATION

CLAIBORNE PELL, Rhode Island, *Chairman*

JENNINGS RANDOLPH, West Virginia
HARRISON A. WILLIAMS, Jr., New Jersey
EDWARD M. KENNEDY, Massachusetts
WALTER F. MONDALE, Minnesota
THOMAS F. EAGLETON, Missouri
ALAN CRANSTON, California
WILLIAM D. HATHAWAY, Maine

PETER H. DOMINICK, Colorado
JACOB K. JAVITS, New York
RICHARD S. SCHWEIKER, Pennsylvania
J. GLENN BEALL, Jr., Maryland
ROBERT T. STAFFORD, Vermont

STEPHEN J. WEXLER, *Counsel*
RICHARD D. SMITH, *Associate Counsel*
ROY H. MILLENSON, *Minority Professional Staff Member*

CONTENTS

CHRONOLOGICAL LIST OF WITNESSES

MONDAY, JANUARY 7, 1974

Page

Sawhill, John C., Deputy Administrator, Federal Energy Office; accompanied by Dennis Bakke, Federal Energy Office; John Ottina, Commissioner of Education, Health, Education, and Welfare; and Donald Worthmann, Deputy Assistant Secretary for Programs Systems, Health, Education, and Welfare 2

Wise, Dr. Helen D., president, National Education Association; Paul B. Salmon, executive secretary, American Association of School Administrators; Robert D. Benton, superintendent, Iowa Department of Public Instruction, representing the Council of Chief State School Officers; and Harold V. Webb, executive director, National School Boards Association, a panel on elementary and secondary education 84

Bailey, Stephen K., vice president, American Council on Education, and Layton Olson, legislative director, National Student Lobby, a panel on higher education 212

Scott, Dr. Ann, vice president for legislation, National Organization for Women 226

STATEMENTS

Bailey, Stephen K., vice president, American Council on Education, and Layton Olson, legislative director, National Student Lobby, a panel on higher education 212
Prepared statement 215

Benton, Dr. Robert D., State superintendent, Iowa Department of Public Instruction 123

Driscoll, Dr. John G., president, Iona College 274

Salmon, Paul B., executive secretary, American Association of School Administrators 115

Sawhill, John C., Deputy Administrator, Federal Energy Office; accompanied by Dennis Bakke, Federal Energy Office; John Ottina, Commissioner of Education, Health, Education, and Welfare; and Donald Worthmann, Deputy Assistant Secretary for Programs Systems, Health, Education, and Welfare 2

Scott, Dr. Ann, vice president for legislation, National Organization for Women 226
Prepared statement 229

Webb, Dr. Harold V., executive director, National School Boards Association, Evanston, Ill 141

Wise, Dr. Helen D., president, National Education Association; Paul B. Salmon, executive secretary, American Association of School Administrators; Robert D. Benton, superintendent, Iowa Department of Public Instruction, representing the Council of Chief State School Officers; and Harold V. Webb, executive director, National School Boards Association, a panel on elementary and secondary education 84
Prepared statement 87

ADDITIONAL INFORMATION

Articles, publications, etc.: Page

"Education and the Energy Crisis," January 5, 1974 24

"HEW News," press release by Secretary Caspar W. Weinberger, December 17, 1973 8

"Impact of the Current Energy Crisis on Oregon Schools and Community Colleges," by Dale Parnell, superintendent of public instruction, Oregon State Department of Education, January 2, 1974 ... 131

"Schools and the Energy Crisis," National School Boards Association Research Report No. 1973-3 160

Communications to:

Chief State school officers and State higher education executives, from John Ottina, U.S. Commissioner of Education, Department of Health, Education, and Welfare, Washington, D.C., December 12, 1973 (with attachment) 49

Frohlicher, Jean, associate counsel, Subcommittee on Education, from W. H. Kimbrough, director, division of administration and finance, Department of Education, State of Alabama, December 28, 1973 285

Parrill, Thomas J., Grand Prairie, Tex., from Senator Claiborne Pell, a U.S. Senator from the State of Rhode Island, and chairman of the Subcommittee on Education, January 9, 1974 290

Pell, Hon. Claiborne, a U.S. Senator from the State of Rhode Island, from:

Cawelti, Dr. Gordon, executive secretary, the Association for Supervision and Curriculum Development, December 18, 1973 239

Garrett, W. S., superintendent, Montgomery Public Schools, Montgomery, Ala., December 18, 1973 281

December 21, 1973 283

McCall, Robert B., deputy director, Education Commission of the States, Denver, Colo., January 14, 1974 (with enclosure) 252

Parrill, Thomas J., Clifton Court, Grand Prairie, Tex., January 7, 1974 286

January 14, 1974 278

Pattie, Kenton, vice president and educational director, National Audio-Visual Association, Inc., Fairfax, Va., January 4, 1974 (with enclosure) 240

Sawnill, John C., Deputy Administrator, Federal Energy Office, Washington, D.C., January 8, 1974 (with attachments) 42

Simon, Hon. William E., Administrator, Federal Energy Administration, from Caspar W. Weinberger, Secretary, Department of Health, Education, and Welfare, December 7, 1973 (with attachments) 26

Table:

Table III.—Shortfalls and strategies, first quarter 1974 (quantities in thousands of barrels per day) 4

EFFECTS OF ENERGY CRISIS ON EDUCATION, 1974

MONDAY, JANUARY 7, 1974

U.S. SENATE,
SUBCOMMITTEE ON EDUCATION,
COMMITTEE ON LABOR AND PUBLIC WELFARE,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10:10 a.m., in room 4232, Dirksen Senate Office Building, Senator Claiborne Pell, chairman of the subcommittee, presiding.

Present: Senators Pell, Hughes, Javits, and Schweiker.

Committee staff present: Stephen J. Wexler, counsel; and Jean S. Frohlicher, associate counsel to the subcommittee.

Senator PELL. The hearing of the subcommittee will come to order.

The subject of today's hearings will be the current "energy crisis" and the effect it will have on the education offering of the Nation's schools and colleges.

From the first indication of an energy shortage, there have been reports of cuts in the hours of operation in elementary and secondary schools, and semesters have been shortened in postsecondary education.

Many individual groups, like the National Education Association, American Council on Education, and the National Student Lobby, have issued information which touch upon certain facets of the problem.

Our subcommittee will today attempt to delineate the magnitude of the effects of the energy crisis on education and further seek to understand just what is the administration's energy policy with regard to education. Where do education entities stand in the order of priorities and what thought has been given to the rippling effect of the energy crisis on schools? For example, the increased cost of oil will create higher expenditures for already overburdened school budgets. Where are the schools or school districts to get that money? For example, the cost of gas seems to rise every week, yet literally thousands of school children are bussed to school. What effect is this increased price in fuel going to have on school budgets?

The subcommittee wishes to know how the Federal Energy Office makes decisions with regard to the allocation of oil for education purposes. Has the advice of educators been sought, or are these decisions made on a purely ad hoc basis?

Many in the Congress question some of the priorities which have been set in the allocation of fuel oil. It seems that allocations are available to keep stores open at night while allowing a cutback in elementary and secondary schools. Evidently, the Administration is content to have athletic contests taking place at night under lights, but will force colleges to close. In other words, just what priority is this Administration giving to education?

To my mind, the education community of this country has acted with alacrity to the call of the administration to conserve energy. Students and teachers will have to make up the lost days in the summer, yet they have not organized sitins or demonstrations. The voluntary affirmative action of the education community is to be congratulated. This committee does recognize the fact that the education community itself may have to further change its habits, may have to schedule vacations in the cold weather, may have to use its schools on 12-month, 16-hour day basis

Recognizing that this energy crisis is not a short-term problem and will be with us for years to come, it is my hope that through these hearings an understanding can be reached as to the magnitude of the crisis, the groundwork leading to a solid base for future action by the Administration.

The Government will be represented here by several witnesses. We will hear Mr. John C. Sawhill, Deputy Administrator, Federal Energy Office, who is accompanied by the Commissioner of Education of HEW, John Ottina, and Donald Wortmann, Deputy Assistant Secretary for Program Systems, HEW, and one other person who will be identified.

Mr. Sawhill, you may proceed.

STATEMENT OF JOHN C. SAWHILL, DEPUTY ADMINISTRATOR, FEDERAL ENERGY OFFICE; ACCOMPANIED BY DENNIS BAKKE, FEO; JOHN OTTINA, COMMISSIONER OF EDUCATION, HEW; AND DONALD WORTMANN, DEPUTY ASSISTANT SECRETARY FOR PROGRAMS SYSTEMS, HEW

Mr. SAWHILL. Thank you, Mr. Chairman.

Mr. Chairman, I am pleased to have the opportunity to testify before you this morning on the subject of education and the energy crisis.

We are encouraged to see that the American people are taking the energy crisis seriously, and that your Committee is attempting to assess the impacts of energy shortages on the vital area of education.

The Federal Energy Office is anxious to assist you in your deliberations in any way we can.

My statement this morning will outline the dimensions of the energy shortage for the first quarter of 1974 and our general strategy for dealing with it. I will then attempt to describe the effects of this shortage on our educational institutions, particularly in the two major educational uses of energy—transportation and heating.

Next, I will discuss measures that can be, and in many instances have been, taken to conserve energy in our schools.

And, finally, I will share with you our concerns about how the total energy situation will affect a particularly critical aspect of our educational system—its finances.

As you have probably read and heard before, the Nation must gear itself up to withstand a 2.7 million barrel a day shortfall in petroleum energy during the first quarter of 1974—that is this quarter; 2.7 million barrels a day represents a shortage of 13.6 percent of the amount of

petroleum energy we Americans would consume this quarter, if demand were not constrained.

This figure, as a national average and an average for all petroleum products, is staggeringly high. You may be aware that the 2.7 million barrels per day figure is slightly lower than the original 3.4 million barrels per day figure we had previously announced.

We have been able to lower our estimate of the overall shortfall for several reasons, including a milder autumn than usual, leakages in the Arab oil embargo, and the gratifying response of the American public to our pleas for voluntary conservation.

The 2.7 million barrel a day figure which I have mentioned today is, in our opinion, as accurate as possible. We believe that the responsible approach to national energy planning is to use the worst, but still realistic impact; to do otherwise would leave the United States with lower inventories later in the year and hence more vulnerable to unexpectedly high demand or reduced imports.

The Federal Energy Office has developed the most sophisticated econometric model in the country for estimating energy supply and demand. Nevertheless, our model, like any model, still is based on certain assumptions such as a "normal winter," a continuation of a leak-proof Arab oil embargo, and drawdowns to the minimum operating levels cited by the National Petroleum Council.

I have included in my statement a table which breaks down the overall shortfall by product. I would call your attention to those products which are used by our school systems:

[The table referred to and subsequently supplied follows:]

Table IIIX

SHORTFALLS AND STRATEGIES, FIRST QUARTER 1974
(Quantities in thousands of barrels per day)

Product	Gross Shortage: Thous. Bbls. per Day	Gross Shortage: Percent of Unconstrained Demand	Actions Taken or Announced: Action	Fuel Saving	Shift in Refinery Output[1]	Net Shortage	Potential Actions
Kerosene Jet Fuel	156	15%	Reducing airline usage to 95% of 1972 levels. (Allocation Regulations)	200	-50	--	--
Naptha Jet Fuel	187	32	--	--	187	--	--
Gasoline	759	11	15% reduction in usage (Allocation Regulations)	900	-487	346	Draw down inventories 15% below historical averages; price increase tax increase, or coupon rationing
			55 m.p.h. speed limit, Sunday[2] station closings	(200)			
Distillate Fuel Oils	339	8	Reduction of 6° in residential and 10° in commercial heating (Allocation Regulations)	500	-161	--	--
Residual Fuel Oil	812	23	Oil to coal switch in some power plants	100	437	--	Excessive use taxes on electricity, natural gas
			wheeling, base loading	100			
			6 9/10° heating reduction (Allocation Regulations)	125			
			Daylight Savings Time	50			
Other Petroleum Products	470	11	Petrochemical feedstocks receive 100% of current needs, remaining petroleum products are allocated available supplies.	396	74	--	--
TOTAL	2,721	14		2,399	--	346	--

[1]Cost of Living Council regulations published December 4 encourage refinery shift; projected shifts remain to be validated.
[2]Actions taken to restrict demand, but impact is subsumed in supply restriction through allocation program.

Mr. SAWHILL. Gasoline is used in all but a very small percentage of school buses, although diesel-powered vehicles are far more efficient. The shortfall here will be 900,000 to 1.2 million barrels per day, or 18 percent of unconstrained demand.

Diesel fuel and No. 2 heating oil are included in the middle distillate category. The latter is used for heating by many schools. A shortage of 340,000 barrels per day is predicted, or 12 percent.

Residual fuel oil is used for heat in some buildings and is also used by electric utilities for conversion into electricity. It is also used in those schools, such as Princeton University, my alma mater, which have self-contained electrical generating plants. The shortage here is 810,000 barrels per day or 23 percent.

While we do not know how many schools use No. 2 heating oil, as opposed to residual oil, for heating purposes, we do know that, on the average, 0.7 barrels of oil are used per year per pupil. This works out to a national average of 223,000 barrels per winter day.

Propane, butane, and propane-butane mixes are included in the "other" category, and are used for heating in a few small rural schools.

Our basic strategy in dealing with these shortages is to maximize jobs. The American people clearly would rather turn down their thermostats at home, at work, and in their schools, and switch from their private cars to public transportation than suffer widespread unemployment.

To this end, we are seeking shifts in refinery production out of gasoline and into other products, primaryily middle distillates, residual fuel oil, and other petroleum products. We have two ways of encouraging such shifts.

The first is through price controls. The Cost of Living Council lowered the refinery profit for refined gasoline by 1 cent, and raised the price of other refined products by 2 cents on December 4, 1973. A further price increase for middle distillates of approximately 1 to 1½ cents was announced 2 weeks later, as part of a formula.

In addition, the mandatory petroleum allocation regulations announced December 27, mandated refinery shifts to increase heating oil supplies.

Even after these production shifts have been accomplished however, we are still faced with shortages in energy supplies.

Let me outline for you the impacts that our allocation regulations are expected to have on the American educational system.

The middle distillate regulations will be officially announced on January 11, and implemented on January 15. They will have substantial effects on the heating of our schools.

All elementary and secondary schools using No. 2 heating oil or residual fuel oil will receive 100 percent of the fuel required to heat the buildings to an indoor ambient temperature 6° below the heating level that existed last year.

Exceptions to this general rule may be granted by State energy officials in those cases in which last year's thermostat settings were so low as to make the new temperatures unrealistic.

All higher educational institutions using No. 2 heating oil or residual fuel oil will receive 100 percent of the fuel required to achieve an

indoor ambient temperature 10° below that in existence last year. The only exception will be residential buildings which, as with other residential heating, will be required to lower temperatures by only 6°.

Here, again, we will be flexible in administering this program and in a position to grant exceptions in hardship cases.

I might pause here to briefly explain that when we talk about turning down thermostats 6° or 10°, we are talking about an equivalency of 6° or 10° so that by rescheduling classes, or changing hours, or better insulation of buildings, the thermostat might not necessarily have to be turned down to that full extent. So it is an equivalency, not an actual requirement, to turn down the thermostat by that amount.

In the area of transportation, our gasoline and diesel fuel regulations specifically include school buses in the category of public passenger transportation. School buses are thereby entitled to 100 percent of their current requirements.

We intend to encourage public transportation wherever possible. It is far more efficient for one school bus to transport 35 children to school than for 35 mothers in 35 automobiles to do the same job. An average school bus gets 85 passenger miles to the gallon as compared to 20 passenger miles for the average automobile.

In recognition of this fact, we recently called on public school boards and principals, together with Commissioner Ottina, requesting that they review their policies on student driving, and suggested that they limit the use of parking lots and the number of pupils permitted to drive.

Some persons are attempting to use energy conservation as a tool to reopen the discussions on school busing.

The Office of Education estimates that only 0.4—1.2 percent of all public school students—or only 1.2—3.6 percent of all public school students bused, are bused for the purpose of achieving racial desegregation in our schools.

The savings achieved by canceling such transportation are miniscule, while the costs in terms of social equity could be substantial. As such, it is an unwise policy and, in my judgment, a serious error for the Nation to use the energy crisis to effect significant changes in our social policy.

The Office of Education is currently undertaking a study, in coordination with the Department of Transportation, to seek ways of conserving energy used in school buses. This study, to be completed by January 18, 1974, is expected to delineate conservation measures including, but not limited to, alternative bus schedules and routes.

As far as other transportation for students and faculty is concerned, we have asked local school boards and college officials to discourage the use of private automobiles by faculty and students wherever possible. Public transportation, carpools, motorcycles, and bicycles are good substitutes for the automobile left home.

These are the measures that the Federal Energy Office is authorized to mandate. In addition, there are many other measures that can be taken on a voluntary basis to conserve the use of energy in our schools.

First, significant electricity savings can be achieved by reducing lighting in our schools.

Americans of all ages have become accustomed to grossly overlighted buildings. Even children watching the blackboard or learning to read only require approximately 50 footcandles of light. And the lighting requirements for nonwork areas, such as corridors, are even lower.

Yet, most of our schools have been designed to provide much more light than is really necessary.

In addition, a surprisingly high proportion of our schools still use incandescent bulbs for lighting rather than fluorescent. Flourescent bulbs are 2½ times more efficient in terms of electricity consumed.

Our statistics show that the fuel consumed in generating the electricity to light our schools and operate fans, pumps and other electrical equipment amounts to the equivalent of 21 million barrels of oil per year, or 55,000 barrels per day.

As you can see, even a lighting program that would save only 25 percent of the electricity consumed, and this is not an unrealistic objective, would result in a savings of almost 14,000 barrels of oil per day.

Additional savings can be achieved in the area of heating. Included in my statement is a copy of HEW Secretary Casper Weinberger's press release of December 17, 1973, stating that reduction in ambient indoor temperatures as low as 60° F. do not endanger human health, even in the case of the very young and the very old. Nevertheless, lower temperatures are uncomfortable.

[The information referred to and subsequently supplied follows:]

HEW NEWS

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

BLAMPHIN--(202) 245-6867

FOR IMMEDIATE RELEASE

HEW Secretary Caspar W. Weinberger said today that the effects of the fuel shortage on the Nation's health "should be minimal, if common sense prevails.

"Our medical specialists report," Secretary Weinberger said, "that a reduction in room temperatures from 72 to even down to 60 degrees would have no effect on the likelihood of an individual contracting a common cold, influenza or pneumonia, and by the same token, a reduction to 68 would certainly have no ill effects.

"Many will develop these illnesses this winter, as they do every winter, but reduced heating will not be the culprit."

The Secretary made those observations in releasing a paper on the impact of the energy shortage on health, prepared in the Office of Dr. Charles C. Edwards, Assistant Secretary for Health.

Secretary Weinberger noted that the 6 degree temperature reduction recommended for the Nation's schools would be well within the range of temperature reduction that would not adversely affect health.

Dr. Edwards said that while lower temperatures can be uncomfortable, particularly if they are achieved too quickly, they by themselves are not harmful to health.

"This is not to say that anyone will enjoy the energy shortages," said Dr. Edwards, "but we can handle the situation without danger to health by following a few common sense precautions."

Among those cited were:

. Avoid unnecessary discomfort in adjusting to lower room and office temperatures by turning the thermostat down gradually over a period of several days rather than all at once.

. Wear enough warm clothing to keep comfortable.

. Try to maintain as high a room humidity level as possible.

General health rules to be kept in mind, said Dr. Edwards, include:

. Reduced temperatures, moving from warm to cooler temperatures, and being wet and cold--while certainly uncomfortable--do not increase the risk of catching colds, influenza and pneumonia.

. Since most bacteria and viruses grow better at higher temperatures, some experts feel that cooler living may even be a benefit in disease control.

. There are no special heating requirements for infants, preschoolers, young children or pregnant women. Their needs are no different from those of healthy adults.

. The average new-born child can cope quite well with home temperatures as low as 60 degrees if clothed and in a home where the humidity is kept as high as possible.

Dr. Edwards said that any nutritional effects of the energy crisis "will not be the result of any temperature change, but will come from restrictions in transport, school closings, unemployment, inflated prices, and agricultural shortages."

He said that there are "only minimal requirements for increased calorie intake--not more than 100 additional calories a day to adjust to 60 degrees as opposed to 72 degrees.

"For some individuals," said Dr. Edwards, "particularly the affluent, overweight person, reduced temperatures may assist in weight reduction since more calories will be used to maintain body heat and there probably will be more physical activity."

According to Dr. Edwards, "only a handful of common chronic diseases are aggravated by severe temperature reduction." He cited myxedema (thyroid underactivity) peripheral vascular disorders, arthritis, angina pectoris, and diabetes mellitus.

"But the majority of patients with these can accommodate to lower temperatures without harm to health if they reduce their thermostats gradually," he said.

Dr. Edwards said householders should remember that "the elderly have a slower adaptation time than young adults to shifts of temperature," and that "low humidity in a hot room can be harmful to some respiratory disorders.

"Many older individuals will take a month or longer to become accustomed to a 10 degree temperature reduction," he said, "but the vast majority of the elderly can stand lower temperatures," he said, "with no harm to their health."

Personal health problems to be avoided, said Dr. Edwards, include electrical hazards, and the danger of explosion or fire from the storage or transport of gasoline.

The suggestions for cold weather health maintenance were developed from information solicited by the Human Resources Group at HEW from among the Department's health agencies and academic authorities.

Dr. Edwards said the Department "is working closely with the Federal Energy Administration to develop national policy during the current energy crisis.

"What we are learning from such surveys and studies as these," said Secretary Weinberger, "is what the English, Northern Europeans and previous generations in our own Nation always knew--how to live comfortably and decently and remain healthy in our environment as nature intended it to be, not as we made it at the expense of ecological distortion.

"We simply are pointing out," said the Secretary, "that common sense, thermal thriftiness and good health go hand in hand. Dr. Edwards and his staff have shown us what to expect."

One of the side effects which people will learn, said Dr. Edwards, is that "people who drink lose more body heat than people who don't.

"The belief," he said, "that the warm glow associated with drinking keeps a person warm is a myth."

# # #

Note to Correspondents: Health Impact Statement attached.

IMPACT OF ENERGY SHORTAGES ON HEALTH

All statements apply to reduction in temperature from normal (72°F) to 60°F.

I. EFFECTS OF REDUCED ENVIRONMENTAL TEMPERATURE (72°F TO 60°F) ON THE INDIVIDUAL.

A. Normal (Physiological) Effects.

1. Increased basal metabolic rate (minimal).

2. Increased level of physical activity.

3. Increased heart rate, cardiac output, respiratory rate (minimal).

4. Some individuals will subjectively complain of feeling cold.

5. This will have no adverse effect on the health of the individual.

6. Corrective measures should include warmer clothing, well-balanced diet, and more physical activity.

B. Communicable Diseases.

1. Scientific studies have shown no direct effect of cold alone on communicable diseases.

2. Indeed, the growth of most bacteria and viruses is inhibited at lower environmental temperatures.

3. Reduction in the environment from 72°F to 60°F will have no effect on the likelihood of infection with the following:

   a. "common cold"
   b. influenza
   c. pneumonia

   If an individual develops these conditions (and many of us do every winter), reduced heating will not be the culprit.

4. Incomplete studies indicate as well that being wet and cold does not increase the risk of communicable diseases when all other factors are controlled.

5. The effect of crowding (due to cold) on the transmission of respiratory illness requires further studies.

6. The populations of Northern European countries (e.g. the United Kingdom) routinely live at this lower range of temperature without apparent ill-effect.

7. There is no evidence that rapidly alternating exposure to warm and cold environments increases the risk of contracting a disease.

C. Nutritional Effects.

1. The major nutritional effects on vulnerable groups will be secondary health effects due to restrictions in transport, unemployment, inflated prices, and agricultural shortfalls.

2. Pregnant women, infants, school age children, the chronically ill, the elderly and the poor constitute the most vulnerable nutritional groups.

3. School closings may prevent some school children from getting their single well-balanced meal of the day.

4. Nutritional effects of sustained energy shortages will be of major clinical importance.

5. Increased caloric requirements associated with reducing temperatures to 60°F are minor for the individual or his family (no more than 100 calories per day).

D. Personal Safety Effects.

1. Experts are seriously concerned with hazards to individuals and families associated with reductions in traditional energy sources and premature conversion to alternate fuels.

2. Recent newspaper reports suggest that this effect is already being seen. (e.g. the Vermont man who installed a coal stove on wooden floor and burnt his house down).

3. The most serious areas in which public education is needed are:

   a. emissions (particularly carbon monoxide poisoning).
   b. electrical hazards.
   c. explosions.
   d. fires.
   e. transport (general concern with storage of gasoline in cars, garages and confined spaces).

4. Regulatory efforts must continue to assure that heating appliances mass-produced in response to the energy shortages meet acceptable safety standards.

E. Industrial Health Effects.

1. Experts most concerned with indirect effects on worker's health due to changes industry might make to cope with energy shortages.

2. Specific examples of this indirect effect include:

   a. lower standards of maintenance.
   b. increased production in vital industries without considering effect on worker.
   c. usage of heating fuel for operations within a plant (where the two categories are interchangeable).
   d. substitute fuels may pose increased environmental hazard to workers.

3. Increased importance of coal will definitely result in increased numbers of miners, increased case load of silicosis ("black lung"), and more industrial compensation cases.

F. Psychosocial Effects.

1. Public education and sound motivation are the key elements in minimizing adverse psychosocial effects.

2. Psychosocial effects (and possibly their magnitude) can be predicted on the basis of previous behavior of the American public during analogous periods in history. In New York, for example, number of admissions to mental institutions rises in a predictable fashion with the unemployment rate.

3. Experts are of the opinion that behavior of the American public during the present energy crisis will follow the model of economic recessions rather than war-time emergency privations.

4. Based on this prediction, the following problems are expected to increase proportionately with the energy shortages:

    a. Unemployment.
    b. Mental illness admissions.
    c. Suicide.
    d. Serious crimes (including homicide).
    e. Alcoholism.
    f. Drug abuse.

5. Based on this prediction, the birth rate is expected to decline.

6. Transportation, personnel, and budget will be limiting factors in responding adequately to these needs.

II. EFFECTS OF TEMPERATURE REDUCTION (FROM 72°F TO 60°F) ON VULNERABLE GROUPS

A. General Comments.

1. All agencies polled agreed that the health effects of energy shortages would be enormous in their area of expertise and concern.

2. Particular concern was expressed that the present energy policies and expected consequences would be felt earlier and more keenly by the poor.

3. The health impact will be indirect; that is, due to adverse trends and shortages in areas which are the primary concern of other agencies.

4. The most critical of these trends and shortages as applied to health are:

a. Unemployment.	)	Reduced purchasing
b. Price Increases.	)	power amongst poor.
c. Transportation Shortages.	)	
d. Increased Case Load.	)	
e. Personnel Shortages.	)	Reduced health services
f. Budget Ceilings	)	to the poor.

5. All agencies emphasized that significant regional differences in health needs could be anticipated.

6. The Center for Disease Control expressed concern in two additional areas:

   a. Urgent need to develop a functioning surveillance and feed-back system with the States so that human resource and health needs can be identified as soon as possible and expedite an appropriate DHEW response.

   b. That particular attention be paid to informing State Human Resource Agencies as soon as possible of developments in the energy crisis and the division of Federal and State responsibilities.

B. Lower Income Groups.

1. The preceding General Comments apply particularly to the poor.

2. Geographic and regional differences in health needs will be most striking in lower income groups.

3. Within a given geographic region, the rural poor may differ significantly in the level and type of health needs.

C. Newborns and Infants -- 0 to 30 days.

1. The only essential energy requirement within the temperature range of 60°F to 72°F is that hospital nursery units must be kept at optimal operating temperatures.

2. Hospital incubators for newborns and high risk infants must receive their full power requirements.

3. The fact that a household contains an infant is not an indication for an automatic exemption from reduced fuel allocation.

4. The average infant at home can cope quite well with temperatures of 60°F to 72°F provided that:

   a. There is a competent mother or mother-figure in the household;

   b. The infant is kept warmly clothed;

   c. The relative humidity is kept high.

5. Should extreme shortages develop, consideration should be given to energy requirements peculiar to young infants and children (e.g. washing of diapers and heating food). These special needs represent only a small fraction of a family's basic energy requirements.

6. Transportation must be available for clinic visits and an appropriate feeding formula provided in adequate amounts.

D. Infants and Pre-Schoolers - 30 days to five years.

1. No essential heating requirements within the temperature range of 60°F to 72°F.

2. Statement #C-4 immediately above applies to infants and pre-schoolers as well.

3. Children of this age in institutions such as Day-Care Centers can tolerate the presently anticipated 6°F reduction from 72°F without hazard to health.

4. These institutions should not close on the mistaken belief that to comply with a 6°F reduction (72°F-66°F) would harm the health of the children.

5. Transportation to clinic and a proper diet for all remain essential.

E. School Age Children - Five to 18 years.

1. No essential heating requirements within the temperature range of 60°F to 72°F.

2. Statement #C-4 immediately above applies to school age children as well.

3. Children of school age can tolerate the presently anticipated 6°F reduction in schoolroom temperature from 72°F without hazard to health.

4. Schools should not close on the mistaken belief that to comply with a 6°F reduction (72°F-66°F) would harm the health of the children.

F. Pregnant Women.

1. No essential heating requirements within the temperature range of 60°F to 72°F.

2. Physiological evidence indicates that the increased metabolic activity of pregnant women provides a slightly better ability to cope with cold than the same woman before she became pregnant.

3. The critical concerns for pregnant women during the energy shortages are that transportation be available for pre-natal visits and that she maintain a well-balanced, nutritious diet in the face of rising food costs.

4. The fact that the household contains a pregnant woman is not an indication for an automatic exemption from fuel allocation.

G. The Elderly Without Particular Disability.

1. A major physiologic change in all of us as we age is a slower adaption time to sudden shifts in environmental temperatures.

2. This fact is well-documented in studies on acclimatization of the elderly to warm weather; studies on the response of the elderly to cold weather are incomplete but suggest a similar conclusion.

3. Very warm room temperatures ($78^{\circ}F$-$80^{\circ}F$) with the low relative humidity that must apply (20%) is definitely harmful to many older individuals, particularly those with chronic respiratory disorders.

4. The vast majority of the elderly, however, can gradually adapt to a $6^{\circ}F$ reduction ($72^{\circ}F$-$66^{\circ}F$) without any harm to their health. This acclimatization often takes 25-30 days and varies widely among individuals.

5. The key to successful acclimatization is likely to be whether senior citizens are properly motivated to participate in the energy conservation effort.

6. Psychologically, older individuals respond positively to being treated as mature adults with a social role rather than as patients or exceptions.

7. The presence of an older individual (65 and over) in the home is an indication for a 30-60 day exemption from reduced residential heating allocations. The thermostat should be reduced 1 or $2^{\circ}F$ per week during this period until the desired temperature is reached.

8. Healthy older individuals who wish to participate in the energy conservation effort should not be discouraged from doing so by family or friends because of the mistaken fear that it may be harmful to their health.

9. Many studies have shown that the elderly will pay bills in the following order of priority: rent, utilities, telephone, food, and health services.

10. Inflation, a fixed income, poor diet, and lack of transportation to essential services pose a far greater threat to the elderly at home than a gradual 10% reduction in room temperature.

H. The Chronically Ill of All Ages.

1. Only a handful of chronic diseases are aggravated by reduced environmental temperatures. The five most common of these (in decreasing order of sensitivity to cold are:

   a. Hypothyroidism (myxedema).
   b. Peripheral vascular disorders (including Raynaud's phenomenon).
   c. Arthritis (particularly rheumatoid and osteoarthritis).
   d. Angina pectoris precipitated by exposure to cold.
   e. Diabetes mellitus (often associated with peripheral vascular disorders).

2. There are also extremely rare conditions that are precipitated by exposure to cold: Two examples would be cold urticaria and the occasional epileptic whose attacks are precipitated by immersion in cold water.

3. The majority of patients with these conditions can cope with temperature reduction from normal to 60°F without adverse effect on their health provided that they are properly motivated, the heat reduction is achieved gradually, and proper protective clothing is worn.

4. Certain individuals for medical or psychological reasons may not be able to adjust to reduced environmental temperatures. They should be encouraged to help save energy to the extent that they are able.

5. Mental deficiency or physical handicaps per se are not associated with increased health risk due to cold. Although exceptional cases will arise, the presence of these conditions in the household is not an indication for an automatic exemption from fuel allocation.

6. Exemption from fuel allocation should be based upon physician certification of medical or psychological need to the local petroleum allocation board. These boards should have medical representation and/or access to a medical advisory group. It is also understood that these boards will operate within the framework of State and Federal guidelines on petroleum allocation.

7. Once again it must be emphasized that inflation, a fixed income, rising medical costs, poor diet, and lack of transportation pose the most serious threat to the health of the chronically ill during the energy shortages.

Mr. SAWHILL. Accordingly, we are exploring ways that additional savings in heating fuel can be accomplished, and the Office of Education, working with the Federal Office of Energy Conservation, has established a clearinghouse to provide information on conservation measures through local and State education agencies.

Measures already identified include:

Change dress codes as necessary to encourage students and faculty to wear warmer clothes.

Reduce nonclassroom areas, such as cafeterias and gymnasiums, by 10°.

Reduce night time temperature by 15°.

Maintain heating plants at maximum efficiency.

Avoid storing books or other classroom supplies on heating fixtures.

Keep all doors and windows closed.

Checking all automatic door closing mechanisms.

Repair all broken windows promptly.

Reschedule sporting events from nighttime to daytime to conserve both heating and lighting. Out-of-town events can also be limited.

Reduce evening and weekend noninstructional activities such as scouting or community meetings. These activities could be moved to other buildings which would ordinarily be heated in the evening. These would include private homes, fire stations, et cetera.

We consider closing of schools during the coldest weather an option of last resort.

Perhaps you have seen the Office of Energy Conservation television commercial featuring George C. Scott. He states the problem clearly. We have two choices, he says. We can close our schools or we can seek other ways to conserve the same energy. He then admonishes the viewer not to be "fuelish."

I am sure we all agree that our educational system is basically an investment in the American future. To close schools while other commercial enterprises remain open would really be "fuelish."

The Department of Health, Education, and Welfare is currently making a study of the potential impacts of school closings. It is believed that this study will produce evidence in the following areas:

Ripple effects of school closings. For instance, increases in delinquency.

The overall savings of school closings. The children who are not in school may be at home watching television or consuming energy in other ways, and the net savings might actually be surprisingly low.

Increases in demand for day-care centers as a result of school closings.

Before leaving the subject, let me bring to your attention the fact that the Veterans Administration has revised its regulations to permit veterans to continue receiving GI bill benefits if extended school closings occur because of fuel shortages.

All segments of American society are making positive responses to the energy crisis. We are confident that the Nation's educators are also responding positively in every way they can.

However, rising fuel prices in general, and some of the changes I have outlined will create some financial difficulties in school budgets that are already tight.

Costs of producing domestic crude oil, costs of importing foreign crude oil, and costs of refining these products have risen dramatically, and may rise again. This will result in higher prices for heating fuels and for transportation fuels. These increased operating costs will hurt as far as the average school board budget is concerned.

Additional administrative costs in terms of increased teachers' salaries may also be a factor if school years are extended.

Further, short-term installation costs of such energy-saving items as extra building insulation, new fluorescent light bulbs and fixtures, and the extra maintenance required to keep heating facilities, school buses and windows and doors in top condition will represent additional expenses.

The Office of Education is presently conducting an analysis of the impact of the energy crisis on school finances. This study will assess alternatives available to local school boards facing financial problems due to the energy crunch.

In closing, I would like to point out that, even though we at the Federal Energy Office have been dealing with the immediate problems of the energy crisis, we do recognize the long-range impacts of what we are doing.

Unfortunately, the energy crisis is not merely a short-term problem.

Prior to the embargo, we were importing almost one-third of our petroleum requirements, and if we continue to increase consumption at the current rates, we could be importing almost 50 percent of our petroleum requirements by 1980.

This country cannot afford to put itself in a position where it is so dependent on the rest of the world for vital energy resources. We must move decisively to increase our domestic supplies and reduce the rate of our demand growth so that we may never again be subject to economic blackmail.

For this reason, the FEO is now gearing up to launch major programs in both energy conservation and energy resource development.

In the coming weeks, we will be spending a considerable amount of time discussing these programs with Congress and working on the legislation necessary to put them into effect.

In short, we are destined to have long-term changes in our lifestyle in order to make it possible for us to use energy more efficiently. Some of these changes could have significant implications for the operation of our schools.

You can be assured that we will work closely with your committee to insure that the American educational system will be in a position to perform effectively its mission as it adapts to the need for greater energy conservation.

Thank you.

Senator PELL. Thank you very much, indeed.

Mr. Ottina, we have the statement that you sent up today, which we will put into the record in full, entitled "Education and the Energy Crisis."

[The statement referred to follows:]

C

January 5, 1974

DHEW: EDUCATION AND THE ENERGY CRISIS

The Department of HEW has taken a number of actions, in cooperation with the FEA, to respond to the energy shortage, particularly as it impacts on our constituency. An energy task force has been established in the Office of the Secretary composed of representatives from each of the Department's agencies. In addition, we have provided, on detail to the Federal Energy Administration, a Human Resources Team, to work on the development of energy conservation policies and to insure that the needs and problems of education and other human resource institutions are considered as those policies are developed.

For the immediate future then, the principal HEW role vis-a-vis the educational community and the energy shortage is to seek a rapid reduction in the ambiguities with which that community is now being required to cope. Over the longer term, there is a clear HEW responsibility to assess the economic, educational, and social effects of reductions in the availability of energy to our education systems and institutions and to devise mechanisms through which the negative effects may be minimized.

A number of actions have already been initiated to deal with the near-term ambiguities and resultant problems being encountered by the education community.

- The Federal Energy Administration has included elementary and secondary educational facilities along with residential as a specific fuel allocation category in the draft regulations pertaining to middle-distillates and similar priority category designations are expected on other forthcoming fuel and gasoline allocation regulations and/or guidelines.

- The Office of Education has established a clearinghouse function in Washington and through the OE Regional Commissioners to facilitate information exchange and problem identification within the educational community.

- The Office of Education is also developing a program to provide information and technical assistance on energy conservation measures which will be made available to SEAs and LEAs through the OE Regional Commissioners. This will include preparation of an information package, in loose-leaf notebook form. The content of this notebook will vary for each region, and it can be updated to include new information. This information package should be completed shortly after finalization of the various Federal fuel allocation regulations.

As you are aware, significant ripple effects may occur if energy shortages result in prolonged school closures this winter. In addition to potential impairment of the educational progress of students, extended school closures will place extremely severe strains on the social and income maintenance systems and services upon which the schools and their students, faculties and parents impact. Day care centers can expect an immediate and significant increase in demand from single-headed families or families in which both parents work, and for which the school has therefore served a custodial as well as an educational function. These parents will be faced with a choice of leaving their jobs or finding alternative supervision for their children. To the extent that some parents will be unable to find day care openings, unemployment compensation and income maintenance expenses of the State and Federal governments will increase. School based social services will also suffer; for example, the nutritional services operated through the school lunch and breakfast programs, and the job retraining and career education services provided by many communities through their school systems.

Dependent upon the actual availability of energy reserves, the DHEW requested placement of elementary and secondary facilities in the same fuel allocation priority category as residences should reduce the attractiveness for (or necessity of) SEAs and LEAs to consider extended closings as an energy conservation measure. (New draft FEA regulations include such a priority.)

Given the decentralized nature of the nation's educational system, it would be both ineffective and inappropriate for the Federal government to attempt to mandate specific energy conservation measures to be taken by all educational institutions. However, it is clearly HEW's responsibility to ensure that SEAs and LEAs are fully cognizant of the ripple effects of any decisions they make to utilize school closings as an energy conservation measure. In fact, it is not at all clear that the energy savings are an effective trade off. In addition to adverse effects such as probable increased crime and delinquency, economic and other social disruption, children out of school might consume as much energy as would be consumed by those in an energy conscious schools.

Accordingly, in addition to the technical assistance packages on energy conservation measures already under preparation by OE, we are preparing a paper for SEAs and LEAs discussing the effects of various options for school closures.

Little data is available on which to base a prediction of the educational costs of school closings, or shortened school hours, which might be adopted in areas facing a severe fuel shortage. Most educators believe there will be negative effects, but we cannot measure those, or predict the varying consequences of school closings of different durations. If, despite our efforts to discourage long school closings and to find less drastic fuel conservation measures, some schools do close for long

periods because of a fuel shortage, the NIE has prepared a contingency plan to gather data about the educational effects of such closings. We will discourage school closings as an energy-saving device, but if they do occur, NIE will seek to make a more precise assessment of their educational consequences.

The energy crisis will impact upon school operating budgets in a number of ways:

- o increased administrative costs to meet teacher contracts if the school calendar year is extended due to winter closings;
- o increased operating costs resulting from fuel and gasoline price increases; and
- o increased operating costs due to purchase of insulating materials, if schools do this.

Although we do not see this as a major problem nationwide, we are examining the extent and magnitude of increased operating costs.

At our request the FEA has included in its draft regulations and is expected to do so in the final version school bus fuel requirements in the priority allocation categories for gasoline and middle-distillates.

Due to increased operating costs for transportation, as well as the limited availability of fuel, we are preparing guidance to SEAs and LEAs on methods of fuel conservation which will not result in substitution of private automobile transportation (which would be far more costly in energy terms) for school bus usage.

As with elementary and secondary, the principal problems in higher education relate to school closings and increased operating costs. Although the ripple effects associated with closures of higher education institutions are considerably less than those associated with the elementary and secondary schools, their impact on certain segments of the population could be severe and require consideration on our part.

One potential problem -- that of students on the GI bill -- has been resolved. The Veterans Administration has issued regulations permitting veterans to elect either to continue receiving benefits during extended school closings or terminate benefit payments until the resumption of classes. Each month the veteran elects to receive benefits which will count against his basic 36-month entitlement, but the option provided by the revised regulations will permit individual veterans to determine when in their educational pattern it would be the least detrimental to forego benefit payments.

From available information, it appears that the energy shortage will impact most severely upon community colleges and vocational and technical schools which serve part-time and evening students. A higher percentage of these students are from low income groups than is the case for other postsecondary institutions and therefore, the educational costs would fall disproportionately on the disadvantaged if school closings or schedule curtailments are used to conserve energy or reduce operating costs. We are proposing an analysis of the effects of the energy shortage upon community colleges, technical and vocational schools, to include recommendations concerning actions the Federal government might take to mitigate against a disproportionate impact upon them and their clientele.

Increased operating costs will affect all postsecondary institutions and may result in tuition increases in the 1974 academic year. These increases may require revisions in our level of aid to institutions, as well as the funding levels for student financial aid.

As Secretary Weinberger indicated on December 17, 1973, when releasing a health impact statement which covers the effect of the energy shortage on individual health, "the 6° temperature reduction recommended for the Nation's schools would be well within the range of temperature reduction that would not adversely effect health."

In summary, the Department is:

- o closely monitoring the impact of the energy crisis, and any Federal regulations issued relating to energy conservation, upon the educational community, and the ripple effects of this impact upon other human resource delivery systems and services;
- o establish a clearinghouse mechanism for the exchange of information within the education community regarding the energy crisis;
- o developing guidance and technical assistance packages on energy conservation for distribution to all SEAs and LEAs; and
- o studying the feasibility of alternative emergency mechanisms to minimize the negative impact of the energy shortage upon the educational community.

BEST COPY AVAILABLE

Senator PELL. Mr. Ottina, I have had a chance to skim through the statement. I think it has a lot of meat, a lot of interesting material. We have not had a chance to look over it with any great detail, however. Is there anything further you would like to add to the statement of Mr. Sawhill?

Mr. OTTINA. No, Mr. Chairman; I think the statement is quite complete.

Senator PELL. Thank you very much, indeed.

In connection with the basic lack of fuel I was curious as to what these figures are, because they change—2.4 million, 2.7 million, and I recently saw another figure. How long do you think the 2.7 million will remain as the benchmark of the shortfall?

Mr. SAWHILL. In making our estimate of the energy shortage we started out with an estimate of 3.4 million barrels per day.

What happened was that because of import leakages, because of the warmer autumn than we expected to have, and because we really have a tremendous response on the part of the American people to the energy conservation measures that were enacted by Congress, and some announced by the administration, we were able to lower our estimate of the shortage to 2.7 million barrels per day.

Now, that estimate is based on a leakproof embargo and a normal winter, and a demand growing at a rate of economic growth that is consistent with 2.5 percent growth in real income, real gross national product.

I believe that the assumptions are still basically sound, and that for planning purposes we have to base our estimates of the shortage on the worst case, a realistic case of the energy shortage, so I think at this point that that estimate will remain pretty firm, but it is an estimate, obviously an estimate, and as such, is subject to changes on either side. It can be reduced slightly, or increased slightly, but I think for planning purposes that that estimate for the first quater is the one that we will be using.

Senator PELL. Thank you.

I was struck with your Office of Education estimates that only 0.4 to 1.2 percent of all our public school students, or 1.2 percent to 3.6 percent of all public school pupils bused, are bused for the purpose of achieving racial desegregation in our schools.

What you are saying is that the number of children bused for the purpose of racial desegregation is minute, and any changes in those policies would have minimal impact on the fuel shortages.

Mr. OTTINA. The statistic Mr. Sawhill quoted was derived from our office.

Let me point out that though there are a large percentage of children bused, approximately 45 percent of the children are provided transportation by the school districts in secondary and elementary.

Senator PELL. I am sorry, but what was that again?

Mr. OTTINA. Approximately 45 percent nationally of children are provided transportation in elementary and secondary public education.

Our figures are very difficult to discern which percentage of those, and which ones are actually being transported for purely desegregation purposes.

Our estimates of a year ago, which these are, show that only approximately 0.4 to 1.2 percent of the total were being bused for those purposes.

Now, those totals may be higher this year.

Senator JAVITS. What was that figure? Did you say that 0.4 to 1.2 percent were being transported, and that would represent 45 percent?

Senator PELL. As I read these figures from your statement, you presume here that only one-third of all public schoolchildren are bused, the other two-thirds either walk or are driven by their parents, is that correct? I would have though it was a larger percentage that were bused than that. Indeed you just said 45 percent and your percentages would have to be amended.

Mr. OTTINA. It is, Senator. Our estimates are that it is approximately 45 percent, so that the 1.2 to 3.6 percent is a larger number than we would normally expect.

DISCONTINUANCE OF SCHOOLBUSING FOR DESEGREGATION TO SAVE ENERGY A RED HERRING

Senator JAVITS. Mr. Chairman, on that subject, if I may just interject here, are you telling us in the Senate and House that any dismantlement of busing for school desegregation based on saving energy is a red herring, and untrue. Is that a fact?

Mr. SAWHILL. That is what I said in my statement.

Senator JAVITS. That is flatly untrue?

Mr. SAWHILL. That is what my statement said, that we did not use the energy crisis to justify a broad change in social policy, and that is what this would imply.

Senator JAVITS. But Senator Pell and I are going further than that. The fact is, on the merits, it is untrue.

Mr. SAWHILL. Yes, it would provide very, very little savings.

It seems to me if you are looking for savings in the educational system that that is not one of the places that you would look.

Senator JAVITS. The point is it was represented to us as an energy economy, and we thought we saw through it, and that it was just a ploy using this emergency to panic us into dismantling the critically important element of the justice under the Constitution of the United States. You bear that out on the facts?

Mr. SAWHILL. We certainly do bear that out, and I am glad to have the opportunity to come up before you and clarify that today.

Senator JAVITS. Thank you very much.

Senator PELL. Thank you very much.

I want to return to these figures, Mr. Ottina, because they do not make sense to me. What you say here in the statement is that one third of public school students are bused, and two-thirds find their way to school some other way. That is as I read these figures. It is 0.4 to 1.2 to 3.6, and since it is a smaller portion of those who are bused, and the larger portion are not, it seems to me that your figures do not jibe.

Mr. OTTINA. Senator, let me again state that the 0.4 to 1.2 are indeed figures that we calculated about a year ago, and to the best of our knowledge those are accurate.

If we applied 45 percent to those figures they would be lower than the numbers that are shown below.

You are quite right, sir, that it would be approximately 0.8 to 2.4 percent approximately, and we should correct that to reflect that.

Senator PELL. Right.

27-765 O - 74 - 3

In other words, let us either use the 45 percent, or the figures in the record, and we will have the record corrected by you.

Mr. SAWHILL. We will correct the record for you, Mr. Chairman.

Senator PELL. Thank you.

Now, in connection with the school term and the period of time that schools are open. I am struck by the fact that in the northern parts of the United States, in New England, very often some of the private colleges will have long winter holidays in order to conserve fuel, and students will come back for a shorter summer vacation. This is very much the same custom in Europe, particularly Northern Europe.

I was wondering what the effect would be if such a system were adopted in elementary and secondary education? I do not think it would add much to delinquency, because when it is cold outdoors, I understand there is less juvenile delinquency than when it is warm.

What would be wrong from the viewpoint of cooperating with the energy program of substantially increasing the Christmas vacation, and making it into kind of a summer vacation?

Mr. OTTINA. Mr. Chairman, it is a topic that I think bears a considerable amount of careful thought and study.

There are presently, I believe, some obstacles which would need to be taken into account before one quickly jumps into such a solution.

One of them is that many of the districts operate on a teacher contract basis with teachers, and to reschedule the contract would be either an element of additional cost, or at least an element which would need to be worked out in conjunction with the teacher representative unions.

Senator PELL. Excuse me. Is the teacher contract on the specific number of months, or per annum?

Mr. OTTINA. Some are based on the specific time periods from the beginning of the academic year, or roughly the first of September to a closing date, and so altering the closing date would alter the effect of the contract.

Senator PELL. But yet the teachers have always been saying that they are full-time annual employees, that they work by the year, and when they want to strike they maintain they are year round employees.

They cannot have it both ways, can they, Mr. Ottina?

Mr. OTTINA. Many teachers are not paid on a year round basis. Many teachers are paid for a 10-month academic year, and do seek, and hold other positions during the summer months.

Mr. Chairman, that would be one of the problems that would need to be overcome, because it would have an effect on the teachers themselves not being able to secure perhaps employment during that period to supplement their income.

There are another set of alternatives which deal with the issues that were raised in Mr. Sawhill's testimony which has problems for perhaps the mothers and fathers who are working and need to find ways of caring for the children, which many of the schools do provide care, and perhaps an augmentation of their case, or other type day care centers would need to be taken into account.

There is also, as I am sure most of you gentlemen are aware, in our schools a program for many children in terms of nutrition and health and feeding which may have some affect on the children.

Many of these same children that we were describing as being affected by the winter months often attend summer programs, and the programs are continued for them as well.

I think what I am saying, Mr. Chairman, is that the idea does merit considerable attention. It is a topic which we have begun to study. It is a topic which we will look at, but it is one in which there many circumstances which must be examined before action is taken.

Senator PELL. I realize in this regard that we in the Senate are in a glass house; that this room is too warm, and here we are sitting in a hearing on the energy crisis. I think that this room shows one of the problems for when it is warmer outside and you have a completely air-conditioned building, you cannot cool it off as you should, by opening the windows. Apparently it is against regulations to open the windows in this room, but I see that we have finally been able to violate the regulations, and have opened the windows, for which I am very glad.

Mr. OTTINA. If I may take advantage of your statement, let me add one of the problems we all have, and I think it is true in the schools as well, is that the staff that is responsible for this has been operating under a set of conditions which, as we can tell in the future, will no longer be applicable, and their whole philosophy and training needs to be readjusted to take into account certain measures that heretofore were unnecessary.

Senator PELL. I understand that Secretary Weinberger wrote Mr. Simon a while ago, in December, pointing out the ill effect of the energy crisis or the education of disadvantaged children, and the special problems of the handicapped.

I am wondering what steps have been taken by the Federal Energy Office to help the problems of these particular children.

Mr. SAWHILL. What we have done is to have been in touch with our regional offices, and made them aware and sensitive to this problem, so that if transportation requirements, for example, that is if transportation is required for these handicapped children, our regional offices will be in a position to make fuel available to them so that they will have the kind of transportation that they need.

Senator PELL. From your statement, as I read it, there is no limitation on transportation fuel for school buses, any way, is there?

Mr. SAWHILL. No, school buses will get 100 percent of current requirement, but some of these children are transported by private automobiles, as well.

Senator PELL. But what about in the schools themselves, where the youngsters do not have the same facilities as normal children, will they be given special care?

Mr. SAWHILL. As I pointed out in my statement, we are going to administer these programs on a very flexible basis.

This was our whole premise from the start, and our actions to date bear that out, Mr. Chairman.

If it turns out that some of these schools need to be heated at higher temperatures because of the physical disabilities of the children, we will certainly make provision to make fuel available.

Mr. OTTINA. If I may add a statement to that, Mr. Chairman.

The Energy Office has been very cooperative with the Government, and as a result of some discussions that we have had in the past, they have changed at least two aspects of their proposed schedule.

One was to change the percentage of the reduction from 10° to 6° of the ambient heating for schools, and second, to provide that school transportation be afforded the same priority as public transportation.

Both of those suggestions were incorporated in the regulations, and both are aimed at helping education.

Senator PELL. How about the question of teachers who have to drive great distances to get to work? Will they be given special consideration for that 3 percent of the fuel that is being allocated?

Mr. SAWHILL. I think that is going to be more difficult to administer. We may be able to make some exceptions for them.

As the program is established now there would not be any way that they could identify themselves at a gasoline station as having a priority, so until or unless we go to some kind of a rationing system they are going to have to line up at gas stations like the rest of us. They will not have been given a priority, Mr. Chairman.

The only way we can provide a priority under our current regulations, and under the law as we currently understand it is to bulk users of gasoline, and teachers, like most of the rest of us going to work do not buy at bulk terminals. They buy at regular gas stations like the rest of us, and they do not have any special priority.

Senator PELL. Did you have any contact with the education community in setting up your priorities or programs?

Mr. SAWHILL. What we tried to do was to work with HEW and the Office of Education, and we received a number of comments from the educational community, and based on those comments, and based on the comments from the Department of Health, Education, and Welfare, we did make a number of changes in the proposed regulations that will be reflected in the final regulations that we issue this Friday.

Senator PELL. Senator Javits?

PUBLIC PERCEPTION OF ENERGY CRISIS

Senator JAVITS. Thank you very much, Mr. Chairman.

Mr. Sawhill, I notice with very great interest that on the first page of your testimony you say we are encouraged to see that the American people are taking the energy crisis seriously.

Now, my visits at home indicate that that is to be questioned for this reason. The American people are responding to the crisis seriously, and I think that is most admirable on the part of our country, and shows its strength, its intrinsic confidence in itself, and in our institutions, and that is wonderful.

But, at the same time, many people I find are very doubtful that this is a real crisis, and have an idea that somehow or other it is oil companies that are promoting it, and in order to raise prices they have come up with a shortage that does not exist.

Now, they draw their evidence from two facts; one, the fact that there is a marginal shortage even reported, and you gave us the detail on that, bearing in mind that we use now roughly 16 million barrels per day. You record a shortfall of 2.7 million barrels per day, and many people challenge that on the ground that that is not just

Middle East oil, it is also Venezuelan oil and other oil, not embargoed. Second, visual evidence allegedly of harbors crowded with tankers waiting in line to unload into tanks already overflowing.

Now, I have endeavored to explain that myself by pointing out, first, that the people who looked at these tankers in New York Harbor, for example, have not looked in the New York Harbor before, so they have no comparison. There may have been tankers standing on line forever as far as they are concerned, so that it not particularly a responsible statement. Second, we would expect our inventories to be buttressed while we can, while there is still some possibility. And, third, the leakage question which is completely unresolved, and which you must explain to the country as being a factor upon which a great country cannot depend, as it might be snuffed out this very afternoon.

Now, please comment on all of those things, because this is very critical, very real.

Let me say that I have talked to your boss about it. He is very familiar with it, and I think in the public forum now we ought to try to lay it out, and I know of no more sympathetic or congenial frame of reference than the one which we owe to our chairman, having had the foresight to call this hearing.

Mr. SAWHILL. Well, I appreciate very much your comments.

I think that on the question of whether we have a shortage, is the energy crisis real, we face that every day, and we have to deal with it, and we have to convince the American people that it is real and that it is a serious situation.

Senator JAVITS. Let me interrupt you.

Do you say that it is a crisis, and make that representation to the people.

Mr. SAWHILL. Absolutely, and I think the basis on which we say that are the reductions that we have already seen in imports.

Imports were running in early November in excess of 7 million barrels per day, and the latest week for which we have information shows imports running in the area of 5.5 million barrels per day.

The very fact that we have had this dramatic reduction in our imports I think gives credibility to the shortage that we face.

Now, as far as the tankers are concerned, we have seen reports in the news media about tankers lying off the coast and waiting for higher prices, so we checked with the Coast Guard and with the Navy to try to determine exactly what is the situation; are there excess loadings and unloadings.

We also checked as to whether there are a larger number of tankers off our shores than there has been before, and the reports come back that no, there have been no unusual movements of tankers, and no excess amount of tankers off our shores and so, you know, we have to base our policy on what we hear from the responsible persons within our Government.

I think the other point to make on the tankers is that they are not only used to transport oil into this country, but they are also used to transport oil from one part of this country to another, for example, as you know, we are embarked on a program now to take some residual oil from the Gulf Coast to New England, and this will help alleviate some of the shortages in that area.

Some of this tanker movement is moving some of the fuel around in this country.

Senator PELL. Excuse me, the pictures that show the tankers show them riding low as if they are full.

Mr. SAWHILL. I think many are full, but I think the point I was trying to make is that there are not an excessive number of these tankers, that there is not an unusual number of them.

I think as Senator Javits pointed out, as the people go over the bridge they look over the bridge, and they see tankers in the New York Harbor. They are where they always were, but they are much more visible than they were before.

As far as the inventory is concerned, last spring we lifted the restriction on imports into this country, and a lot of people who were not able to import before began to import.

Fortunately for this country they filled up their tanks with oil from the Middle East and other parts of the world, so I think we went into the embargo situation with our inventories in good shape, and so our inventories are full, and our inventories have stayed in good shape through the fall because of the abnormally warm weather which we are very thankful for, and would like to see it continue for the rest of the winter, and because of the way the people have responded.

It is very gratifying to us to see the kind of response that we have had to this energy situation.

We had a report recently, for example, that for 19,000 homes in the six New England States consumption of home heating oil was 19 percent below last year, even after adjustment for weather. This means that almost everybody in these 19,000 homes is turning down his thermostat by 5° or 6°, or the greater amount of degrees that we have requested, and I think this is proof that the American people recognize that we have a shortage, and are reacting and responding to it.

We had another report the other day from a heating oil dealer that 75 homes he serviced, that 94 percent of the people there were practicing conservation measures.

Senator JAVITS. Where is this?

Mr. SAWHILL. This is in New Jersey?

Senator JAVITS. Would you say therefore that although many look at the shortage with cynicism, they nonetheless are practicing conservation and that this paradox may very well exist in the American society?

Mr. SAWHILL. Well, I hope they are not looking at the shortage with cynicism, that there is a suspicion that there is a credibility problem, and we see that in the press every day. That is why every week we publish the situation report and send it to the Congress, and make it available to the press, to indicate to the people that there is a real shortage, and discuss the assumptions upon which we base our figures, and admittedly, our assumptions are based on the worst cases, and the worst case is no leakage, and a complete embargo and a normal winter.

So far we have some leakage and a warmer-than-normal winter, so the situation has not been as bad as we predicted.

Let us hope that it continues to be that way, Senator. Let us hope that as we plan to manage this shortage that we can plan for a shortage that will never really occur because of favorable factors that may develop.

Senator JAVITS. Well, is it not a fact, however, that in that regard you have to be prepared for most thorough inquiry by congressional committees, testing out everything you report?

Mr. SAWHILL. Yes.

Senator JAVITS. As a further element of endeavoring to convince the public, is that not the fact?

Mr. SAWHILL. That is correct, and I think that I should mention at this point, Senator Javits, that we recognize there has been a great deal of concern about the source of our figures.

Our figures, by and large, have come from the American Petroleum Institute, and I think people are concerned that we do not get these figures directly from industry, and we are going to respond to that concern.

Mr. Chairman, we are going to develop a reporting system, and be discussing with the Congress in the early days of your next session legislation to enable us to get information directly from the companies, and beyond that, to get information on the secondary stocks which nobody has today. These are the stocks not in the hands of the refiners, but in the hands of the dealers and jobbers and the wholesalers, where a great deal of oil in this country is stored.

We have to get that information in order to be able to develop responsible policy, and we are going to need this information for a long period of time, so we are embarked on a crash program right now to improve the source of our information, and to have direct access to that information from the industry itself, and incidentally, we are going to be initiating a refinery audit program that will enable us not only to get the information directly from the refiners, but we will have our own officials auditing that information to make sure it is correct, because this question of information is vital to all of us, vital to the Congress to insure that they have access to the best possible information, and to our office, as well.

Senator JAVITS. Mr. Sawhill, I might tell you, in my judgment the Congress will give you the authority and should give you the authority, and that the alleged secrecy which the oil companies feel they need in respect to their own competitive situation will have to be tested out in the courts.

They will have their full rights if you subpena the information to test it under expedited procedures, but the basic need of the public to know in this case I believe is paramount to any other consideration.

LEAKAGES

Mr. Chairman, I do not want to intrude on my time with Senator Hughes here, but I have one other question I would like to pursue, if I may, and that is would you care to deal with the question of leakages in any more precise way, or would it be inappropriate to tell us to what extent the 2.7 million barrels a day figure is valid or invalid in terms of leakages so far?

Mr. SAWHILL. Well, I think that the figures we have on imports indicate that the imports have been declining.

Now, they have not declined to the level that we expected they would, that is the level that would likely be available after giving full effect to the embargo.

We are very grateful for these leakages, and we hope they continue. We have not discussed the specific countries from which we are getting leakages, because I think that would be impolitic to discuss in a public forum.

It may be that we will continue to get these leakages, but it may be that we will get some increased imports from some of the countries that are not embargoing us now.

Senator JAVITS. What is the order of magnitude of this leakage standing beside the 2.7 million figure?

Mr. SAWHILL. The leakage is now about 1 million barrels per day.

Senator JAVITS. About 1 million barrels per day?

Mr. SAWHILL. Yes.

Senator JAVITS. That is a hard fact, but is it a fact too that as a matter of United States policy our Government cannot depend on that in terms of assurance to the people, and we must figure the 2.7 million as the basis for our planning?

Mr. SAWHILL. That is the way we feel at this point.

OIL COSTS

Senator JAVITS. The last point I have is on cost. There is also a lot of cynicism suggesting that the oil companies are fleecing the public, and that the relatively minor percentage of oil which we are short really shows up in the question of price, because the rest of it is domestic, and it is questioned why they should get these knockout high prices for the domestic product?

Mr. SAWHILL. Well, there have been a number of reasons for price changes which have occurred, and I think the principal reason is the fact that the countries from which we import oil have raised their prices really tremendously, they have doubled them officially, and in certain cases they have tripled them on the spot market.

I think if we are going to look to the cause of the price increases that we have seen we have to say that the principal cause is the fact that the people we buy the oil from have raised their prices, and unfortunately, maybe the Shah of Iran should be the chairman of the Cost of Living Council, but he is not, as you know, and he sets the prices, and by that I mean the Arabian countries.

Senator JAVITS. If you will allow me to interrupt you, that is just what people say: He sets the prices for the oil we import. He does not set the prices for the oil we produce.

Mr. SAWHILL. He does not.

Senator JAVITS. Are you confining price rises, or is our Government confining price rises only to the passthrough of the increased cost of the imported oil, or are we simply accepting the Shah's price across the board, thereby enormously enriching the oil companies?

Mr. SAWHILL. No, I think there have been three or four additional areas in which price increases have occurred, other than the passthrough.

The point I was trying to make, the bulk of the increase has come particularly in gasoline because of the passthrough.

The other increase is to encourage refiners to shift from making gasoline to making heating oil. This was done in early December.

Second, the price of domestic crude, that is the controlled crude, which constitutes about 40 percent of our total crude runs in this country was raised $1 per barrel.

Our feeling is that if we are really going to lick this energy crisis in the long term, not just in the short term, we have got to get the price of domestic crude somewhere up near the level of the cost of making alternative sources of energy, and particularly oil from oil shale, oil from coal, and so forth, and it is only when it becomes practical and feasible and economically profitable to make oil from these alternative sources are we really going to be in a position to achieve energy independence, which is the stated policy of our office and of the administration.

The third is the price increase so that a $1 per barrel increase is translated into about 1 penny a gallon increase for gasoline, and there have been some increases in what they call nonproduct costs, that is gasoline stations, particularly independents, have increased, or have experienced increases in the cost of all of the components other than their product that goes into running a gasoline station, or heating oil dealership, like labor and rent, materials, and so forth.

We recently allowed a 1-cent increase in the price of gasoline and heating oil to compensate for these nonproduct costs, and finally, the new crude in this country, and the crude produced by stripper wells, which was exempted by Congress from price controls, has also increased about in line with the increases in imported oil, because that is not controlled.

The prices that we control I think has been controlled. We have permitted some increase in the price of crude, to move it in the direction of coming up to a level of the cost of producing these alternative sources, but we plan to control these prices.

We have an economic stabilization program. It is now the responsibility of the Federal Energy Office to administer this for energy resources, and we will continue to do that.

Mr. Chairman, we are not going to let the price in this country go to what Bill Simon has called emotional levels of the price in the world market.

Senator JAVITS. But it strikes me—and, Mr. Chairman, I will be through—that one thing is missing, and that is you are going to encourage new production by price, which is one of your elements.

You have to provide an excess profits tax for the fellows who do not have the high price out of the new production.

Mr. SAWHILL. You are absolutely right. As you know, in the closing days of your session before Christmas we sent up legislation to that effect, and we hope that will be considered very promptly.

Senator JAVITS. I thank you very much.

Thank you, Mr. Chairman.

Senator PELL. Senator Hughes?

Senator HUGHES. Mr. Chairman, I appreciate your courtesy.

Mr. Chairman, if I could, I would like to ask a question or two just following through on what Senator Javits said.

The question in the public's mind, and in my own mind in watching the news programs, and considering the situation of the airlines, is that there is an available supply of fuel, apparently equal to that of last year, is that not correct?

Mr. SAWHILL. That is correct. As a matter of fact, the supply of fuel this year is somewhat higher than the supply of jet fuel last year, but it is interesting that last year was really an exceptionally low year, so if you compare this year's supply to the past 5 years, it is actually lower.

I think we have 28 days of jet fuel supply on hand. Last year at this time we had possibly 24 days, but the average over the last 5 years has been about 30 days, so that it is wrong to make the comparison of just last year's supply. I think you have to look further back than that.

Senator HUGHES. But what has happened in relationship to it is we have seen a tremendous reduction in flight schedules, and furloughing of thousands of employees, and inconvenience to passengers, and so on, in the process of air transportation, while we still have the same amount of fuel on hand for transportation, and yet at the same time, stories are coming out indicating that the Government or the Congress is going to have to take steps to subsidize the airlines in order for them to stay in business. One seems to contradict the other.

If you do reduce the schedules and furlough the employees, you should be reducing the expenses of the airlines; but you have an equal amount of fuel on hand, and you are controlling the increased cost to the airlines for fuel, if I understand you correctly.

Mr. SAWHILL. Yes, sir.

Senator HUGHES. If we are going to be asked to subsidize airlines in relationship to this picture I would like to know why.

Mr. SAWHILL. I think there are two parts to the question.

The first part is why are we having the reduction in schedules if we have fuel on hand?

Senator HUGHES. Right.

Mr. SAWHILL. I think the fact is our first estimate of the shortage was some 3.4 million barrels per day, which we lowered to 2.7 million barrels per day for the reasons I cited.

As we lowered that estimate we found that there was more fuel available than we had originally thought, and we raised the allocation to airlines from 85 to 95 percent, and we believe, after talking with several of them, that this would enable them to restore some flight schedules and rehire some furloughed employees.

As far as the economics of the airline industry is concerned, we have been working closely with the CAB on this matter about how far you could cut the airlines back without having to go to some type of subsidy program, and it is my understanding, talking to the CAB, that at a 95 percent level, that is an allocation of 95 percent of the 1972 levels, that were provided to airlines, that by and large they would be able to operate; that is not the regional airlines, but the major airlines, national airlines would be in a position to operate without subsidy.

Senator HUGHES. Was any cost analysis available as to the cost of transportation per passenger between rail and airlines? Is not the rail supposedly cheaper?

Mr. SAWHILL. We have seen some analyses like that, but I have not studied them in enough depth to really give you an informed opinion on that.

There does seem to be a substantial differentiation between the cost of different types of transportation, but I think you have to not only look at the actual cost, but then you have to adjust it for the subsidies that are provided in different parts of our transportation system.

Senator HUGHES. One that has not shown up, but will in the future, is the petrochemical industry, and its loss.

I am interested particularly in the relationship between fertilizers and the protection of food, and what is going to happen since we have been through this recent rapid increase in food prices; the question of availability of items, and that now there is an indication that there is going to be a tremendous shortage in the fertilizer industry which could reduce our food production by as much as 20 to 25 percent.

Mr. SAWHILL. Well, I do not have any figures to substantiate that latter statement.

Senator HUGHES. I do not, either. It is a guess on my part.

Mr. SAWHILL. We recognize that the petrochemical industry is really one of the most critical industries in this country because it is the basis for so many of our other industries.

As you know, our program is designed to preserve jobs. That is what it is all about. If we do not do that, we are not doing our job, and so we have made every effort to see that the petrochemical industry was supplied, and our regulations call for supplying the petrochemical industry at 100 percent of its current requirements of the necessary feedstocks to manufacture petrochemicals.

We are now looking at the concern that has been expressed on the part of some members of Congress that one of the problems has been that our export of petrochemicals have risen too rapidly, and this has had an impact on the domestic market, and we expect to announce the findings of our work in that area in the near future.

We are critically concerned with the petrochemical industry, and we make every effort to see that that is fully supplied.

Senator HUGHES. Well, if I may, Mr. Chairman, just make a point that a group of beef producers from my home State of Iowa made about a month ago, they indicated that the cost of fertilizer had gone up from approximately $80 a ton last year to $375 to $400 a ton this last year, five times the increase in total price.

I am speaking now of nitrogen fertilizers in relation to production of corn and beans, and that actually their ability to get it had been reduced; that they were unable to get over 50 percent of what they needed to maintain their production capacities, and that all of their crop was being turned into beef production, which primarily is sold to markets in major cities far from our region of the country.

If this continues, and if the unavailability of fertilizers continues, it will not only reflect on crop production, but meat production, as well.

Mr. SAWHILL. Well, I think there are a number of reasons for that, and I am not an expert in the area, so I cannot cite them all.

I will say this, to the extent that the shortage is caused by a shortage of petrochemicals, we are going to do everything we can to make sure that is not the case.

Senator HUGHES. Well, there is no use in my pursuing that for an answer. We will have to pursue it to see what the economic problem is and what the shortage is.

Have you any indication the shortage is due to transportation?

Mr. SAWHILL. No; I think initially the problem of fertilizers, as I understand it, was that there was a price differential between fertilizer in this country and abroad, and so a lot of our fertilizer was moving out of this country into the export market, and this was causing the price in this country to increase very rapidly, and was also causing our fertilizer supplies to decrease.

Now, I understand some action has been taken to alleviate that, but it is out of my area, I am afraid.

Senator HUGHES. Do you, in fact, keep an eye on it, and are you well aware of the fact that the production months are just ahead of us, and that the next 4 months are extremely critical as to what is going to happen both in the meat market, as well as in the production of feed grains and staple items?

Mr. SAWHILL. Yes, sir, I can assure you we will be very concerned with the agricultural sector of our society, because as you know, agriculture has been asked to turn setaside acreage back into production, and they have to have the fuel to enable them to do that.

Senator HUGHES. Thank you, Mr. Chairman.

Senator PELL. Somewhat along the same line, I know in my own State, with the reduction in the amount of propane that has been coming in, our plastic industries are starting to collapse. There have been some closings and a definite lowering of production, so it is a very real problem, indeed, right now for we are losing many jobs.

Mr. SAWHILL As a matter of fact, we are aware of that. We are meeting today with the committee to preserve the plastics industry, which is bringing this very point to us.

Senator PELL. Good, because this is a problem, as I say, it is not next month, but it was last month.

One general question. I want mainly to keep this on education, but I am curious.

Is it not part of the reason for the whole crisis that the fuel in our country was artificially cheaper before the crisis?

A year ago, the price of gasoline, the price of heating oil, the price of crude was lower in our Nation than in almost any other nation.

Mr. SAWHILL. That is correct, and that is still the situation, and I think to the extent that that price was so low it did not encourage additional production, and alternatively, did not encourage reduced consumption. That was one of the reasons.

I do not think that that was the only reason, but I think it was a contributing factor.

Senator PELL. I think that one of the reasons we have the squander that we have had is because gasoline was dirt cheap 2 years ago compared with any other nation where $1 a gallon for gasoline has been a way of life for most of the rest of the technologically advanced world, is that not correct?

Mr. SAWHILL. Clearly, and if our crude oil price had been allowed to float up at the world market price our gasoline price increases we are seeing now, some of it would have occurred a year or so ago, and I

think this whole process that we are seeing now very rapidly would have happened previously.

Senator PELL. Would you give us, for the record, the figures of a year ago for gasoline, heating oil No. 2, crude oil, for some of the technologically advanced countries in Europe, and if you have it, for the Common Market countries, and maybe for Australia, the Soviet Union, Japan, and the United States? Let us see what those prices were then, and what they are as of your latest figure.

If you can get those up to us in the next day or so, it would be very interesting.

Mr. SAWHILL. We will.

[The information referred to and subsequently supplied follows:]

FEDERAL ENERGY OFFICE
WASHINGTON, D.C. 20461

January 8, 1974

OFFICE OF THE ADMINISTRATOR

The Honorable Claiborne Pell
United States Senate
Washington, D.C. 20510

Dear Senator Pell:

Per your request at the hearing on Monday, January 7, 1974, attached is a chart showing the average 1972 prices for crude oil and several oil products in the United States, West Germany, the United Kingdom and Japan. We have also included figures for 1973, even though most of the figures have not been compiled as of this date.

Let me know if I can be of further service.

Sincerely,

John C. Sawhill
Deputy Administrator

AVERAGE RETAIL PRICES FOR 1972

	CRUDE OIL	#2 HEATING OIL	GASOLINE REGULAR	GASOLINE PREMIUM
United States	3.39	15.5	36.1	40.0
West Germany		96.8G*	75.1	84.1
United Kingdom		30.8G*	67.6	69.2
Japan		27.3*	68.8	82.3

* One Time Price Quotation from July 1972.

G = Gallon

B = Barrel

AVERAGE RETAIL PRICES FOR 1973

	CRUDE OIL	#2 HEATING OIL	GASOLINE REGULAR	GASOLINE PREMIUM
United States	3.82	18.3	38.8	42.8
Japan	3.11B			
USSR	4.25B (USSR does not publish any other figures for our information)			

	Regular Gasoline		#2 Heating Oil		Heavy Fuel i.e. Residual Incl. "Bunker C"		Crude	
	Jan '73	Jan '74	Jan '73	Jan '74	Jan '73	Jan '74	Jan '73	Jan '74
	(¢/gal)	(¢/gal)	(¢/gal)	(¢/gal)	($/ton)	($/ton)	($/bbl)	($/bbl)
Australia	.53 (July 73)	N.A.	40.8 (July 73)	N.A.	$47.04		$3.00	$9.25
France	.87	1.23	27.7	40.2	$28.70	$52.60	$2.97	$10.00
Italy	1.04	1.32	21.8	39.1	$23.00	$101.00	$2.90	$10.00
Japan	.94	1.33	30.2 (July 73)	N.A.	$34.00	$53.06	$2.64	$9.00
Netherlands	1.06	1.11	37.0 (July 73)	N.A.	$36.96	N.A.	$3.60	
Soviet Union	.53	.53	63.5	63.5	$74.20	$95.48	$2.65	$2.65
Spain	.69	N.A.	34.0 (July 73)	N.A.	N.A.	N.A.	$2.87	

Source: Embassies, Dept. State, CIA (BOM, USDI), AGIP

Senator PELL. Now, another question I have is when it comes to priorities, how are you going to handle the question of a conspicuous use of fuel, as in a night baseball game, or powerboating, or also automobile races?

Will the administration suggest cutting back in those areas, or not?

Mr. SAWHILL. We met last week with representatives of the major sports and recreational associations in this country, and frankly, it was a very, very successful meeting, as far as I was concerned, because each one of these associations pledged to reduce their consumption of energy by 25 percent.

The powerboating industry told us they were going to shorten and eliminate some of the races, for example.

The Baseball Association said that 20 percent of the electricity used in night baseball games is consumed prior to the game in batting practice, and so forth, and they were going to eliminate that, and also switch from charter flights for a large percentage of their flights to scheduled airlines.

There were a large number of positive steps announced by each of the associations. We asked each of them to come forward with a plan to reduce their consumption of energy. They agreed to do this, and we expect to have these by the first of February, and at that time we will be in better position to talk to you about specific steps.

The Rodeo Association told us they were going to bring fewer contestants to their events.

The Skiing Association said they were going to set a goal of cutting the energy use by 20 percent at major skiing areas, and also go to a system of lower prices for lift tickets for people that came in carpools, which I thought was a very good idea.

Senator PELL. What about the question of motorboating, pleasure boating?

Mr. SAWHILL. We talked to the Motor Boating Association. They did not have any specific plan, and neither did the Auto Racing Association, because this was really the kickoff of the campaign.

We will have something from them by the end of the month.

Senator PELL. What I am driving at, is that as we believe in the importance of education, and the necessity of keeping some fuel going there. The question really is: Are you going to cut back pleasure aspects of the use of fuel?

Mr. SAWHILL. Well, I do not think there will be an effort made just to cut off pleasure aspects, because those pleasure aspects also mean jobs for a lot of people, and I think we have to balance the employment problem with the problem, and the opportunity to reduce some of the pleasure aspects that you are pointing out.

I think we have to look at this as a delicate balance between how many people we put out of work when we just cut things off, and how much we can do without putting people out of work.

I am convinced that we can cutback our usage of energy by about 25 percent in most sports, and without having any serious effects on employment, and I think if we can achieve that we will have made a major achievement.

Senator PELL. Senator Schweiker?

Senator SCHWEIKER. Thank you very much.

27-385 O - 74 - 4

Mr. Sawhill, I would like to ask one or two questions on a somewhat related topic, which may not come directly under your jurisdiction.

I understand when England went to daylight savings time the early morning darkness hours caused a significant rise in the number of school bus accidents because of the children having to load school buses in the morning.

I wonder if you, or maybe Mr. Ottina might want to comment. Have you considered this? Is it a possibility? If a significant rise in accidents take place, whether it will be worth the gain that we get on daylight saving time?

Mr. SAWHILL. Clearly, if there was a significant rise in accidents it would not be worth the gain.

That is what we would like to say at the outset. There is, however, a significant gain, I think, of about 50,000 barrels a day, we estimate, that is going to daylight saving time, and that is substantial.

Senator SCHWEIKER. What percent is that?

Mr. SAWHILL. Of our total petroleum consumption of roughly 18 million barrels a day, so this would be roughly 1 percent.

Senator SCHWEIKER. There are some honest differences. However, I voted for daylight saving time.

I do not want to mislead you, but there are some honest differences whether the 1 percent is really going to be saved.

I understand the administration at first did not support the concept, and then did so. They had some honest doubts about it.

When I see these statistics on England I am concerned that we are getting into something uncertain and will not make a gain.

Mr. SAWHILL. I think we will make a gain. The exact magnitude of the gain, I think, it is difficult to estimate, and I would not want to say my figure of 50,000 barrels a day is going to be accurate right down to the last barrel.

As far as the accidents that you are concerned with, we have had no evidence from the Department of Transportation that there would be increased accidents.

Perhaps Mr. Ottina would comment on that.

Mr. OTTINA. Senator, we have no facts on this matter as of today, either.

Let me point out that some schools, at their own option, are adjusting the school day. The State of Maryland, for example, some of the local districts have moved the starting time up one-half hour, and in some other places, 1 hour.

I am sure you are quite aware of the particularly short days in the next couple of months will increase in length as time goes on, and we will have a much earlier sunrise.

The problem might well be alleviated by a combination of actions, such as a later starting time for a few weeks, and then going back to normal starting times if incidents of accidents do occur.

Senator SCHWEIKER. Does your office have a monitoring apparatus so that we can quickly detect any change?

How much of a lag is there in reporting accidents?

Mr. OTTINA. As a concern, both knowing what is transpiring in these United States of ours educationally, and as a means of trying to dis-

seminate information not only to Congress, but others as well, about steps that they may be interested in taking in solving their own problems, we have set up an office like that, and Dr. John Bard is assigned to those responsibilities full time, and does constantly attempt to press for the facts in various areas, and he will, now that we are on daylight saving time starting this morning, I am sure begin to get very concerned about the topic you just raised, and that is the cause of accidents, and see if there is an increase, and see if we detect anything along the line.

Senator SCHWEIKER. That is all, Mr. Chairman.

Senator PELL. Senator Javits?

ADDITIONAL SHORT TERM COSTS

Senator JAVITS. Mr. Chairman, just one question, and it goes to Dr. Ottina.

Dr. Ottina, if you would be good enough to refer to page 11 of Mr. Sawhill's statement, you see that he speaks of additional administrative costs, aside from the teachers salaries, because that is speculative, but short term installation costs of energy savings items.

Do you not think that at the same time you study this question of schoolbus energy use which you promised us a report on the 18th, that you ought to look to this question of additional short-term costs, and, you may legitimately find that some kind of a revolving fund may be needed for this emergency in order to get these things done; for example, in New York City, we have the big problem of broken window panes.

Now, that may be nonsensical in terms of the United States of even thinking about that financing, but there are many other things: Insulation et cetera.

All I ask is, should not the subject be studied with a view toward recommendations to us as to first, what, if anything, should be done in terms of funds. Second, they are available; and third, is it desirable to make them available so that we may be guided in this respect?

Mr. OTTINA. Indeed, Senator, our study is more than pupil transportation. Our study is the whole question of energy.

We are attempting to look at fuel, and actually how much is spent, not only for transporting pupils, but heating fuel as well.

We have launched a number of inquiries and factfinding missions in order to assess quickly what part of the budget this does represent.

Our information to date is, let me say, scanty, but our preliminary information is that the cost, per se, of fuel, are not that large in the total school budget, ranging probably in the neighborhood of, oh, 1 percent, or 4 percent on the average, statewide.

We do have three States in particular that we have queried, and they have their percentages. But we have also tried to obtain suggestions from a number of organizations and a number of units. One is the Educational Facilities Laboratory, which has for a number of months been studying the whole question of energy and energy conservation, and have a number of not only booklets, such as I am displaying, but a newsletter which we have begun to distribute to our energy coordinating unit.

Senator JAVITS. May that be included in the record?

Mr. OTTINA. We will be delighted to.

In this particular booklet and newsletter there are a list of suggestions that can be incorporated. We will be looking at these suggestions, not only for short-term, but long-term considerations, such as you suggested, and we will be coming forth with perhaps some means of trying to alleviate the financial needs in order to save long-term fuel and cost.

Senator JAVITS. Thank you, Mr. Chairman.

Senator PELL. Thank you very much indeed.

Thank you, Mr. Sawhill, Mr. Ottina, and gentlemen, for being with us this morning.

Then you will get that statement up to us, Mr. Sawhill?

Senator JAVITS. And the newsletter should be put into the record, Mr. Chairman.

[The information supplied by Mr. Ottina follows:]

DEPARTMENT OF HEALTH EDUCATION AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

December 12, 1973

TO CHIEF STATE SCHOOL OFFICERS AND STATE HIGHER EDUCATION EXECUTIVES:

As educators, you and I have both an expertise and a responsibility in conserving energy in schools at this time of national energy shortage.

I am confident that each of us recognizes that education, like every other social and economic institution, must bear its share of the burden imposed by the necessary allocation of energy resources within our society.

I am equally certain, on the other hand, that we share a concern that education not shoulder an inequitably large share of that burden. Working cooperatively with other HEW officials, I have taken actions to insure that the viewpoints and needs of education are fully represented in the decisions of federal officials responsible for national energy policies.

I have asked Dr. John L. Baird to serve as the USOE Coordinator for Energy Policy. He will assist me and work with Regional Commissioners of Education to coordinate dissemination of information on energy matters that will be of particular interest to leaders in education. He will also be a contact point in USOE on energy problems and issues affecting education.

While I must emphasize that any ideas shared by Dr. Baird's office are to be perceived only as suggestions, I do hope that this sharing will serve to increase the number of avenues open to educators in reaching the best decisions about use of energy.

Dr. Baird is attempting to get some "feel" of the amount and kind of information now going to education leaders from the education organizations. Please help with these organizations whenever possible.

I have also asked a group of senior USOE officials with State [illegible] experience to compile a list of energy conservation measures which these organizations felt would help you. This list may in time be augmented by an exchange of ideas and approaches among educators throughout the country.

We in USOE all hope that we can be helpful in providing and sharing information dealing with inadequate energy supplies. We hope too that this letter will stimulate you and your staff to consider ways in which you may assist the schools and colleges in your jurisdictions. Dr. Baird will be contacting you soon with a more detailed communication on this important topic.

John Ottina
U. S. Commissioner
of Education

SHOUP 23-25 AT650

BEST COPY AVAILABLE

HEW ORGANIZATIONAL ARRANGEMENTS FOR ENERGY CONSERVATION POLICY

The Secretary of HEW has established a Policy Development and Coordination Task Force for Energy Conservation Policy, headed by Don I. Wortman, Deputy Assistant Secretary for Program Systems.

Working with the Department, the Commissioner of Education has designated Dr. John Baird as a full-time Coordinator for Energy Policy in the Office of Education. Dr. Baird's responsibilities include:

1. Insuring that the consequences for education are fully considered in the formulation of federal energy conservation policy;
2. Providing information to the education community about the conservation measures which are required for schools and postsecondary institutions;
3. Arranging for an exchange of information about energy conservation methods which are particularly applicable to schools and postsecondary institutions.

In carrying out the first of these duties, Dr. Baird has contributed to the Department's comments on proposed Fuel Allocation Regulations. The Department's formal comments, as well as those in the other hearings, argued that no part of the society is asked to bear a disproportionate part of the burden of energy conservation, and that the fuel allocation regulations do not create undue hardship because of the special problems of educational and other human resource institutions.

In carrying out his responsibility to assist educational institutions to participate in the energy conservation effort, Dr. Baird has developed a [illegible] of education groups [illegible] an organization of appropriate officials to foster [illegible] dissemination.

Information on [illegible] energy conservation measures which are applicable to schools and other educational institutions is being developed primarily through the Office of Education regional offices. Each regional office has already designated a person who will work with Dr. Baird in the development and dissemination of appropriate informational materials.

Other parts of the Department have taken similar steps to assist their institutions in dealing with the problems of energy conservation.

BEST COPY AVAILABLE

The Department has also provided, on detail to the Federal Energy Office, a Human Resources Team, to work on the development of energy conservation policies and to insure that the needs and problems of education and other human resource institutions are considered as those policies are developed.

In addition to these efforts, the Department is, of course, conducting its own vigorous energy conservation program.

BEST COPY AVAILABLE

DEC 7 1973

The Honorable William E. Simon
Administrator
Federal Energy Administration
Washington, D. C.

Dear Mr. Simon:

The purpose of this letter is to provide specific recommendations and comments on the Proposed Mandatory Allocation Program for Middle-Distillate Fuels published in the Federal Register on November 27, 1973 (FR Doc. 73-25369).

It is essential that Americans face the energy shortage with sufficient knowledge of its magnitude to accept the absolute necessity for demand control. At the same time, I believe that all citizens must be confident that the fuel oil allocations program already proposed, and all other controls being contemplated, will be equitably and effectively designed and administered. Americans must be certain that, to the extent that it is humanly possible, nobody will suffer life-threatening cold, permanent damage, or death because he or she could not obtain emergency supplies of fuel, or relief from a truly unfair situation.

I believe that the program's ability to provide both equity and protection to human life, given the regional variations expected, depends to the greatest extent upon the responsibility and responsiveness of the Local Petroleum Allocation Boards, rather than the establishment of detailed federal standards. Accordingly, I am proposing that these Boards, the only Program bodies in a position to assess local situations, be given sufficient decision-making powers to ensure rapid and just responses to local problems. The specifics of this proposal are within the attached listing of recommendations.

The Local Boards can be no more equitable than the regulations they enforce. This Department has put a maximum effort into assessing the possible impacts of the proposed Middle-Distillate Fuels Mandatory Allocation Program, and we want to review in even greater depth the

other regulations and proposed policies, especially those concerning gasoline, which your Administration will be issuing over the next few weeks. As you know, I have provided a Human Resources Team to work with your Assistant Administrator for Policy Planning and Regulation in developing policies and specific regulations.

Every American must be prepared for some discomfort this winter. Unfortunately there are certain vulnerable groups of our population which cannot and should not be expected to live under exactly the same conditions that the majority can tolerate. The aging and infirm, and many of the country's physically and mentally handicapped citizens are cases in point. At the same time, we have a major responsibility to help educate the public to separate rumors and myths from facts concerning the relationship between temperature levels and health. I have directed that HEW's Regional Offices and Agencies immediately begin preparing our human resource systems and services for the expected problems.

Additionally, I am taking steps to provide HEW assistance in dissemination of information on energy conservation, on ways to help mitigate problems stemming from the energy shortage, and on the specifics of the allocation program proposed. We are prepared to work with your staff in helping the American people understand the fuel controls program through various media, including the development of bilingual public information materials. Internally, the Department has launched a program of energy saving for our own facilities and for organizations associated with HEW programs.

No American should suffer because his landlord has established an unreasonably low "base" usage for fuel, or because his landlord is taking advantage of the allocation program to supply even less than the possible amount of heating. I suggest that each State or local health department establish a minimum or "floor" temperature for its particular geographic area of concern, below which no multi-family residential temperature should be forced to fall. The specifics of this suggestion are within the attached listing of recommendations.

A number of the school systems across the nation have discussed with my staff their intentions to "shut down" for a portion of the winter months in order to obtain some of their required fuel savings. Extended closing

of entire school systems, however, can be expected to impair the educational progress of students and to place extremely severe strains on social and income maintenance systems and services upon which the schools and their students, faculties and parents impact. Day care centers can expect an immediate and significant increase in demand from single-headed families or families in which both parents work, and for which the school has therefore served a custodial as well as an educational function. These parents will be faced with a choice between leaving their jobs or finding alternative supervision for their children. To the extent that some parents will be unable to find day care openings, unemployment compensation and income maintenance expenses of the State and Federal government will increase.

School based social services will also suffer. For over 9 million of this nation's children the free breakfasts and lunches they receive in school are, in most instances, their principal nutritional source for the day. Community services which use the schools as meeting places or centers of activities, including vocational education courses to help many of the nation's citizens upgrade their employment skills, will be affected. Prolonged and evening closings are likely, then, to impact the most needy most severely, and should be taken quite seriously. As the Allocation Program unfolds in its implementation, we will be monitoring closely the trade offs that may occur, resulting in additional energy consumption in substitution for those services being directly curtailed.

My staff is presently assessing the issues related to elementary and secondary school closings. I have serious concerns about the impact on our society of severe disruption of the nation's school schedules. We should not force schools to close because of Federal regulations. Therefore, I strongly recommend that the ambient temperature reduction for schools be treated the same as for residential dwellings. To accomplish this, a category should be specifically designated "Elementary and Secondary Facilities Space Heating - 6° reduction (or equivalent)" to clarify and upgrade school heating's position in the program. At a later date, if conditions warrant, I may request that school heating be moved into a higher priority category.

I intend to provide this Department's complete cooperation in providing for an equitable and effective program of energy savings. As I have mentioned, we are preparing HEW's human resource and social service

systems for the expected problems, and we intend to be responsive to Americans' needs during the shortage. The Human Resources Team which is working with your Assistant Administrator for Policy Planning and Regulation will provide continuing input to particular decisions and regulations.

Sincerely,

Secretary

cc: Box 10
Administrator
Office of Petroleum Allocation
Department of the Interior
Washington, D. C. 20240

Attachment

Specific Recommendations for
Changes in the Regulations

Objectives

Although your priority enumeration is clear, I recommend that Section 1, Purpose and Intent also state clearly that it is the intent of this program to protect the safety and health of America's citizens. Accordingly, I recommend the following addition to the first sentence of Subsection (a), under Section 1, Purpose and Intent:

> "(5) insure that no American suffers life threatening cold, permanent damage or death because he or she could not obtain sufficient fuel on a priority allocation or emergency supply basis."

Hardship Response and Abuse Prevention

The Proposed Mandatory Allocation Program for Middle-Distillate Fuels, as any mandatory allocation program, is susceptible to abuse. Given that we cannot prevent all of the abuses that will occur, government at all levels must be prepared to crack down as hard as the law permits on suppliers who take advantage of the situation to gouge consumers, on black marketeers, and on individuals who illegally procure and hoard fuel oil for their own use. I am particularly concerned with potential abuses which may occur in multi-family dwellings, where the heating oil purchaser is not the end user. In some instances tenants may have received far less than a sufficient amount of heat during the base year 1972, in which case the 6° reduction now called for would be inequitable.

No American should suffer because his landlord has established an unreasonably low "base" usage for fuel, or because his landlord is taking advantage of the allocation program to supply even less than the possible amount of heating. An effective process must exist for

Attachment
2

rapid consideration of emergency appeals from families and individuals who are being inequitably deprived of a minimal level of heat.

There are several ways this can be handled. I suggest that each State or local Health Department establish a minimum or "floor" temperature for its particular geographic area of concern, below which no multi-family residential temperature should be forced to fall; and that the Local Boards be given sufficient authority to rule rapidly and authoritatively, following State and Federal guidelines, on emergencies which are caused by internal temperatures falling below the "floor," or which, in exceptional cases, threaten to cause major damage to a person's health. Specifically, I urge that Section 7(b), Local Petroleum Allocation Boards, be expanded to include the following:

"(4) Local Petroleum Allocation Boards shall:

"(a) increase fuel allocations to Health facilities (as defined by category (7) of "Priority Purchasers" within Section 2. Definitions) which legitimately require more than their certified need to prevent an imminent hazard to the life or health of their patients and permanent or inequitable damage to human life, and decrease allocations where appropriate savings can be realized in non-patient functions (such as administrative or non-patient care areas);

"(b) increase fuel allocations to multi-family residences in which maximum use of allocated fuels results in ambient temperatures below a "floor" temperature, designated by the appropriate State or local Health Department as that temperature below which human life, safety or health would be threatened; and

"(c) otherwise exercise such judgement as is necessary on a case-by-case basis so as to minimize major damage to health and health protecting capabilities of the nation."

Examples of instances in which Local Board discretion will be required include health laboratory and research facilities in which delicate equipment or test animals are housed, and establishment of ambient indoor temperatures for hospitals and institutions for the aged, the mentally retarded and the handicapped.

Associated with the establishment of a "floor" temperature, the following change should be made in Section 5, End-User Allocations -- Heating Uses: delete the period after "specified reduction" at the end of paragraph 5(a) and add ", except that no action shall be taken by any landlord to reduce ambient inside temperature below the 'floor' set by the local or State Health Department in accordance with Section 7(b)(4)(b) of these regulations."

To enable the Local Boards and State Offices to handle the numerous emergencies to which they will be called upon to respond, I strongly recommend that the composition of the Local Boards be specifically designated as equally divided between suppliers, industrial/governmental/institutional consumers, and residential consumers; that State participation and designation of Local Boards be mandated; and that a portion of the costs of these mandated Offices and Boards be financed by the Federal government. Specifically, the following changes should be made:

- Within Section 7 (b), Local Petroleum Allocation Boards delete paragraph (1) and substitute the following in its place:

  "(1) Each State shall establish Local Petroleum Allocation Boards to administer those portions of the program which may hereafter be delegated to the State, and to consider and rule upon appeals for changes in allocations in accordance with Section 7(b)(4) below. The composition of all Local Boards will be one-third suppliers; one-third industrial, institutional, commercial and governmental consumers; and one-third individual residential consumers unconnected with suppliers. A local health official will be an ex-officio member of each Local Board.

Attachment
4

Sufficient boards shall be established to ensure reasonable geographic accessibility and responsiveness to appropriate requests and petitions.

- Within Subsection (3) of that section insert "and individual consumers" after "End-users."

- Add the following sub-section to Section 7, Responsibility of States and Use of State Reserves:

"(d) State Office and Local Board Costs

Federal financial participation in the cost of establishing and operating the State Office and Local Boards designated and established pursuant to this section shall be 75 per cent of costs actually incurred to carry out those responsibilities defined by these regulations."

The following conforming changes will be required:

- Within Section 1, Purpose and Intent, delete the first word of sub-section (d), "Participating" The sub-section should begin "(d) State governments will....."

- Within Section 2, Definitions, under "Local Board," insert after "consider" the words "and rule upon".

- Within Section 5, End-User Allocations -- Heating Uses, delete at the end of the section "recommended by the Local Board and approved by the FOA [sic]" and substitute "directed by the Local Board".

- Within sub-section (a) Responsibilities of States of Section 7, Responsibilities of States and Use of State Reserve, delete "electing to participate in the program of State reserves".

- Within sub-section (b) Local Petroleum Allocation Boards of that section, alter paragraph (2) to read as follows:

Attachment
5

"(2) Rulings of Local Boards shall be reviewed periodically by the designated State Office and the Federal Allocations Officer assigned to that State, and the Federal Officer may issue and/or revise guidelines for Local Board rulings as he considers necessary and appropriate to carry out the objectives of this program."

- Within paragraph (2) of sub-section (c) Use of State Reserve of that section, insert after "State Offices," the following: "Local Boards or Federal Allocations Officers,".

- Within that sub-section alter paragraph (6) to read as follows:

"(6) Each State shall designate a State Office which will issue guidelines to Local Boards for redirection of quantities of middle-distillate fuels to alleviate end-users' hardships within the State. The Federal government shall designate a Federal official in each State to consider the Local Boards' and State Office's actions and guidelines, issue such guidance to the State Office as he considers necessary and appropriate to carry out the objectives of this program, and execute such other functions as are designated to the Federal Allocations Officer by these regulations."

In addition to the concerns expressed above, there are a number of definitional issues which I feel must be clarified. Many of these are complex questions which can only result in inequities if resolved on a regional or case-by-case basis.

The regulations are unclear concerning those situations where oil has or is being used as an alternative fuel. When and if the supplier curtails delivery of the primary fuel, usually on very short notice, an oil alternative will be required; yet historical data will be of limited value in equitably establishing the appropriate base period volume, as oil previously provided only a portion of the energy used for that particular facility. We assume that the "Adjusted non-priority base period

volume" and "Adjusted priority base period volume" categories within Section 2, Definitions will be used to establish an equitable base for calculating allocations under such circumstances.

The definitions of "priority base period volume" and "non-priority base period volume" provided in Section 2, Definitions stipulate monthly calculations. School and other educational institutions, however, may find that an effective fuel conservation measure will be to extend school vacations beyond their base year durations, or to close intermittently throughout portions of the winter. These systems will essentially be spreading their savings over a number of months. The regulations should clearly stipulate that savings obtained by end-users during one month can be added to allocations for that user in subsequent months. To accomplish this, I recommend that the following be added to Section 5, End-User Allocations--Heating Uses, as the final sentence of sub-section (a):

> "An institution which takes action to save fuel by closing its facilities may choose to chronologically reallocate its fuel entitlement. In such a situation, savings obtained in one month will be added to that institution's allocations for subsequent months during that same heating season."

Within the "Priority purchasers" category of Section 2, Definitions, there are a number of changes which I recommend:

- o The first sentence of the definition uses the term "no feasible alternative fuel." "No feasible alternative fuel" should be defined in detail so that users of this regulation will know what "feasible alternatives" are in terms of these regulations.

- o In category (3), "Farming, dairy..." food warehousing should be clearly identified by insertion of ", warehousing" after "food processing". Additionally, we assume that food distribution services include distribution not only to grocery stores but also to schools, social service feeding program centers, hospitals, nursing homes and other congregate residential facilities. I suggest that such a clarification be contained in guidelines issued to Local Boards.

27-769 O - 74 - 5

Attachment
7

- We also assume that category (4), "Industrial or manufacturing uses" and category (5), "Cargo, freight...", taken together, include manufacture, processing, warehousing, and distribution of biologics, medical devices and supplies including pharmaceutical drugs, antibiotics, etc. As above, I suggest that such clarification be included in guidelines to Local Boards.

- Category (6), "Vital community services..." must be further specified to include mandatory education services, including transportation now being provided by schools for their pupils, rehabilitation and social services, and essential governmental regulatory functions. In education, the curtailment of presently provided pupil transportation services would almost certainly lead to increased use of private motor vehicles as a substitute, which would consume more fuel than the initial curtailment might save.

  The program Meals-on-Wheels, which provides the sole source of daily meals to many of the nation's aged and confined citizens, is an example of social services which must be prioritized. And an example of regulatory functions which must be retained is FDA's laboratory and investigational activities nationwide, which must be kept fully operational to adequately protect the consuming public.

  Specifically, category (6) should be altered to read as follows:

  "(6) Vital community services for the protection of public health, welfare and safety, including law enforcement, fire fighting, mandatory educational services (including transportation provided by schools for their pupils), rehabilitation and social services, essential government regulatory functions, utilities, and sanitation; other than for heating purposes."

Attachment
B

- Health facilities within the definition of category (7), "Medical, dental..." include any or all of the nation's treatment centers, from general hospitals to nursing and convalescent homes, drug addiction centers and Community Mental Health Centers. The definitional questions involved are complex. I strongly urge that the Cost of Living Council's definitions for health providers, which are used for Medicare and Medicaid, be identified in category (7), plus certain types of medical facilities not specifically included in those definitions. Additionally, the inclusion of heating purposes under this priority should be specifically identified. This category should be altered to read:

  "(7) Medical, dental and nursing practices, including use of clinics, hospitals, nursing homes and other health facilities listed in Appendix I of 6 CFR 300.18 and 300.19, and congregate residential facilities licensed for specific groups of residents such as the aged, children, etc., to the extent required for the health of the patients; including for heating purposes."

Federally recognized Indian Reservations should be included in the definition of "State" within Section 2, Definitions. The Reservations historically have had limited relations with States, and could be slighted by the States in allocating their 10 per cent reserves. Additionally, a number of them are inter-state. General Revenue Sharing recognizes Federal Indian Reservations as State equivalents -- thus these regulations should recognize them as well. "Federally recognized Indian Reservations," should be inserted after "the District of Columbia," in the definition.

It seems that "Essential community services," which is priority (1) (f) under "Certified need" within Section 2, Definitions, is meant to be the same as the "Vital community services" listed under "Priority purchasers;" however, the change of title makes this unclear. I suggest that "(f) Vital community services...." be used under "Certified need," to conform to the earlier terminology.

Attachment
9

"Usage factor" is defined in Section 2, Definitions, and used in Section 5, End-User Allocations--Heating Uses, in application to "a particular building." Institutions which operate more than one building (such as schools) may find that an effective method of fuel conservation will be the consolidation of operations into fewer buildings than they now occupy. It should be made clear that the savings obtained by taking some buildings out of use can be used in remaining buildings to calculate the overall fuel allocation. Accordingly, I recommend that the following sentence be added in Section 2, Definitions after the sentence beginning "Usage factor...", and in Section 5, End-User Allocations--Heating Uses as a new sub-section "(g)":

> "Where a school system, hospital or other institution occupies more than one building, and they are all under the same administration, that institution may request that one usage factor be computed and applied for all of its buildings, in the aggregate, rather than individual usage factors for each."

As I previously stated, I consider it essential that no American suffer life-threatening cold or major physical damage because he or she could not obtain the necessary supplies of fuel. It is essential, then, that hospitals and medical facilities be afforded first priority even where too little fuel may be available to satisfy all priority users' needs, alone. I strongly urge that paragraph (2) of sub-section 4(b) Priority Allocations, which provides for equal sharing in the event that "sufficient volumes are not available to satisfy all priority requirements," be changed to provide for satisfaction of hospital and medical facility priority requirements first, then equal division of remaining fuels among the other priority users. The second sentence of this paragraph should be altered to read as follows:

> "If sufficient volumes are not available to satisfy all priority requirements, i.e., the total allocable supply is less than the sum of all priority requirements for a supplier's purchasers, the supplier will first meet the priority requirements of medical, dental and nursing facilities" as defined within item (7) of "Priority purchasers" and item (1)(g) of "Certified Need," within Section 2, Definitions; then the supplier will divide the remaining allocable supply proportionately among his

remaining priority-use purchasers, and will request that his State Office or the Office of Petroleum Allocation assign additional supplies to meet his shortfall for priority needs."

School Heating

Section 5(a) establishes the mandatory reductions in ambient inside temperatures which will be required for (1) residential, (2) commercial, (3) government, and (4) other space heating. As I mentioned earlier, a number of the school systems across the nation have discussed with my staff their intentions to "shut down" for a portion of the winter months in order to obtain some of their required fuel savings. Because I am concerned about this, I am presently requesting that a category be specifically designated "Elementary and Secondary Educational Facilities Space Heating - 6° reduction (or equivalent)" to provide a higher priority for school heating.

At the present time, then, the schedule of reductions in ambient inside temperatures within Section 5(a) should be altered to read:

"(1) Residential Space Heating - 6° reduction
"(2) Elementary and Secondary Educational Facilities Space Heating - 6° reduction (or equivalent)
"(3) Commercial Space Heating - 10° reduction (or equivalent)
"(4) Government Space Heating - 10° reduction (or equivalent)
"(5) Other Space Heating - 10° reduction (or equivalent)"

Sub-section (f) of Section 5, End-User Allocations -- Heating Uses is ambiguous. It is unclear whether heating purchasers will receive a second "fill-up" after the initial one. Your staff has indicated that the intention is to provide one filled tank only. I suggest that the ambiguity be clarified by altering the third sentence to read as follows:

"At the next delivery, if more than the calculated quantity has been used, the supplier will deliver only the calculated allotment, and will present a warning note to the purchaser."

THE SECRETARY OF HEALTH, EDUCATION AND WELFARE
WASHINGTON, D.C. 20201

DEC 20 1973

The Honorable William E. Simon
Administrator
Federal Energy Administration
Washington, D. C.

Dear Mr. Simon:

The purpose of these comments is to provide specific recommendations on the Proposed Mandatory Fuel Allocation Regulations published in the Federal Register on December 13, 1973 (FR Doc. 73-26587).

On December 13 the President said, "Everyone will sacrifice something, but none will have to suffer." To assure this, the Federal, State and local systems established must be responsive to individual citizens' emergency needs. I strongly urge that the final regulations contain a clear reflection of the President's statement of purpose.

In my letter of December 7, I described to you some of my concerns with and recommended some changes to the Proposed Middle Distillates Regulations printed on November 27. I recognize a number of the changes which are reflected in the currently proposed regulations (particularly in Middle Distillates) as resulting from my suggestions of December 7, and I appreciate this. The decrease in school temperature has been equalized with that of residences; and medical and nursing definitions have been significantly clarified.

However, the currently proposed regulations leave a number of my earlier concerns unanswered, and raise new issues which we must address. In particular, I continue to be concerned that the success of the program will depend, in large part, upon the responsibility and responsiveness of its administrative mechanisms. While I realize that most Local Boards cannot be established quickly enough to play

BEST COPY AVAILABLE

a major part in the program this winter, it is nevertheless essential that Governors, Chief Executives and communities start now to establish these bodies so they will be "in place" as soon as possible. The energy shortage, we both know, will not end with the coming of this spring. To a great extent the program's ability to respond to inequitable personal hardships and specific local emergencies will depend upon the Local Boards. For these reasons I strongly urge, as I did in my letter of December 7, that the functions of State Offices and any Local Boards they establish be significantly clarified and strengthened so they will be able to deal with the problems which will be unique to each State and community. The specifics of my proposal is contained within the enclosure.

As presently organized, the regulations contain numerous scattered references to Federal, State and local responsibilities, and to hardship relief and priority adjustment procedures. I am suggesting that all of these be consolidated into one subpart, which should be easily identifiable by end-users who may require clarification or assistance at various times throughout the program.

The Proposed Motor Gasoline Regulations raise serious concerns with regard to their potential impact on non wholesale purchasers of gasoline who need gasoline to carry out priority functions and services. I recognize, of course, the difficulties inherent in attempting to allocate motor gasoline equitably when the system deals only with wholesale levels. The Federal Energy Administration should emphasize to the public and to its officials charged with administration of the program at the state and local levels that there are legitimate needs which are not addressed in the present regulations, yet they must be met to assure public health and safety.

I recognize the difficulties inherent in establishing a process which is capable of allocating energy for all of the nation's needs. This Department will continue to work with you, your staff and the States to establish an equitable and effective allocation program.

Sincerely,

Frank Carlucci
Acting Secretary

BEST COPY AVAILABLE

Box 10
and all others

COMMENTS ON
PROPOSED MANDATORY
FUEL ALLOCATION REGULATIONS

GENERAL COMMENTS

The purpose of these comments is to provide specific recommendations on the Proposed Mandatory Fuel Allocation Regulations published in the Federal Register on December 13, 1973 (FR Doc. 73-26537).

There are a number of issues which are common to all of the specific fuel regulations proposed. Particularly important is the equity of the system, its priorities, and the state and local mechanisms established to administer the program and to treat specific programs within different localities.

In this regard, as I mentioned in my letter of December 7, I believe that no American should be forced to suffer inequitably because his landlord has established unreasonably low "base" usages for fuel, or because his landlord is taking advantage of the allocation program to supply even less than the possible amount of heating. To help prevent such abuses I suggested then, and am reiterating the suggestion now, that a minimum or "floor" temperature be established by each State Health Department for its particular geographic area of concern, below which no multi-family residential temperature should be forced to fall.

To assure proper application of that "floor," and to otherwise provide the required health and safety input to Local Board and State Office decisions, a Local and/or State Health official should be an ex-officio member of each Local Board and State Office, respectively. To incorporate this concept into the regulations I suggest that section 200.16 be expanded to include the following:

"(c) The State Office of Petroleum Allocation may (itself or by delegation to Local Boards):

"(1) increase fuel allocations to Medical and nursing facilities (as defined within Sub-part B - Definitions) which legitimately require more than their certified need to prevent an imminent hazard to the life or health of their patients and permanent or inequitable damage to human life, and decrease allocations where

BEST COPY AVAILABLE

appropriate savings can be realized in non-patient functions (such as administrative or non-patient care areas);

"(2) increase fuel allocations to multi-family residences in which maximum use of allocated fuels results in ambient temperatures below a "floor" temperature, designated by the appropriate State Health Department as that temperature below which human life, safety or health would be threatened; and

"(3) otherwise exercise such judgment as is necessary on a case-by-case basis so as to minimize major damage to health and health protecting capabilities of the nation.

"(d) A State or Local Public Health Physician or representative will be an ex-officio member of each State Office and Local Board, respectively."

The adcition of subsection "(d)" proposed above will also be important in providing State Offices and Local Boards with medical expertise to determine hardship cases.

The program's ability to provide equity and protection will depend upon the responsiveness and responsibility of the State Offices and any Local Boards established. In order to allow for adequate staffing at the State level, and to provide incentives for timely establishment of Local Boards where they are needed, I urge that a portion of the costs of the State Offices and any Local Boards established be financed by the Federal government. Wording to the following effect can be inserted into Subpart A - General Provisions:

"State Office and Local Board Costs

Federal financial participation in the cost of establishing and operating the State Office and Local Boards designated and established pursuant to this section shall be 75 per cent of costs actually incurred to carry out those responsibilities defined by these regulations."

The category system within the regulations, whereby certain end uses within the Priority area are further divided into categories [illegible] lends itself to a potentially inequitable and dangerous allocation [illegible]

BEST COPY AVAILABLE

fuel under severe shortage circumstances. As written, in the event that too little fuel is available to satisfy all priority users' needs, all Category I users will get 100% of their certified need before any fuel at all is available to Category II users. Additionally, the system ignores the absolute necessity that hospitals and medical facilities be afforded first priority even where too little fuel is available to satisfy all priority users' needs. I strongly urge that the subsections within each regulation which provide for equal sharing in the event that sufficient volumes are not available to satisfy all priority requirements be changed to provide for satisfaction of health facility priority requirements first then equal division of remaining fuel among the other Category I priority users. (These are subsections 200.37(b)(2); 200.42(a)(2); 200.46(d); 200.61(e); and 200.67 (a)(2) and (c)(2) for Propane; Motor Gasoline; Middle-Distillates; Residual Fuel Oil; and Other Products; respectively.) The following sentence is suggested for addition to the allocation procedures within each specific regulation:

> "If sufficient volumes are not available to satisfy all Category I priority requirements, i.e., the total allocable supply is less than the sum of all Category I priority requirements for a supplier's purchasers, the supplier will first meet the priority requirements of Medical and nursing facilities; then the supplier will divide the remaining allocable supply proportionately among his remaining Category I priority purchasers, and will request that his State Office (or the Federal Energy Administration) assign additional supplies to meet his shortfall for priority needs."

In view of the President's statement of December 13, "Everyone will sacrifice something, but none will have to suffer," it is important that the Federal, State and local systems established be responsive to individual citizens' emergency needs. I recommend, therefore, that the final regulations contain a clear statement of such a purpose. To accomplish this, the following addition should be made to the fifth paragraph within "Notice of Proposed Rulemaking":

> "(J) Creation of a program which is capable of responding to citizens' emergency needs so that no American will suffer life threatening cold, permanent damage or death because he or she could not obtain sufficient fuel on a priority allocation or emergency supply basis."

In this same regard, the second full paragraph in the right hand column of Federal Register page 34414 should be corrected to read "... uses essential to the public health and welfare,..."

BEST COPY AVAILABLE

Box 10
and all others

Subpart A - General Provisions

I have a number of specific comments and suggestions applicable to the General Provisions Subpart of the Products Allocation Regulations (part 200).

Discussions on Local Board and State Office functions and responsibilities are particularly crucial for end-users who may require clarification or assistance at various times throughout the program. As presently organized, the regulations contain numerous scattered and repetitive references to Federal, State and Local Board responsibilities. Statements on hardship relief, such as those contained within sections 200.46 and 200.61(b); adjustments, such as section 200.49; exceptions, such as sections 200.53 and 200.55(f); Subpart M - Delegation of Authority to State Offices and Local Boards; and all of Part 202, Subpart B - Rules Relating to Program Interpretations, Modifications and Adjustments should be consolidated into the General Provisions Subpart of the Products Allocation Regulations to provide one location for information and relief directions. Additionally, the information in section 202.19, Adjustments and Assignments at Local Board Level, and in section 202.11(d), which I interpret as being the procedure for emergency or hardship relief as well as for information, should also be moved into the General Provisions subpart of Part 200. These changes will not only result in better end-user awareness of program functions and responsibilities, but will also eliminate many unnecessary questions from confused administrators and citizens.

In this regard, I also strongly recommend that only one list of Definitions be presented -- i.e., that all terms currently defined within each of the specific regulations be consolidated into Subpart B - Definitions. Presently, there are a number of inconsistencies among definitions in the different subparts. The definition for "base year" would be the only exception, as this differs from one regulation to another.

An attempt should also be made to use essentially the same user categories (e.g., agricultural production, transportation services, etc.) within all regulations. Although priorities may change from one fuel type to another, the titles should be consistent in terminology and definition, and should be defined within Subpart A - Definitions. A common set of user categories, with exceptions only where necessary, will allow users to clearly determine their respective positions relative to each of the different fuels. I will discuss more specific suggestions on HCW-related definitions later in this enclosure.

BEST COPY AVAILABLE

Basically, then, each specific regulation should only contain a description of its particular Priority schema and Certified Need percentages, plus any regulatory items unique to that regulation, with as much of the common terminology and organizational discussion moved into Subpart A - General as possible.

I am also concerned that energy shortages will exacerbate discriminatory credit treatment of the low income population. My staff has already received reports that suppliers are demanding cash upon delivery of heating oil to customers to whom they previously made delivery on standard credit terms. Therefore, I suggest that section 200.14, Normal Business Practices, be strengthened by altering the third sentence to read as follows:

> "However, no supplier may require or impose discriminatively more stringent credit terms or payment schedules on purchasers than the normal business practices of the supplier for that class of purchaser for the preceding year, nor may any supplier modify any other normal business practice so as to result in circumvention of any provision of this chapter."

To enable those States which desire to establish Local Boards to do so as rapidly as possible, I propose that Governors be permitted to designate already existent bodies to carry out the Local Boards' functions. (Such bodies would have to contain appropriate community representation, of course.) To allow this, subsection 200.16(b), Delegation to State Governors - Local Boards should be altered by insertion of "or designate" after the word "create" in that subsection.

As a last comment on the General Provisions Subpart, I suggest that, since Local Boards are not mandated, responsibilities not be delegated to these bodies in the regulations. Responsibility should be delegated to the Governor or his designated State Office, giving them the right to redelegate to Local Boards where they are created.

BEST COPY AVAILABLE

Box 10
and all others

Subpart B - Definitions

For the reasons stated in my comments on Subpart A - General Provisions, I recommend that the definitions presently contained in each of the individual regulations be consolidated into Subpart B - Definitions. There is a need throughout these regulations to "fix" on certain terms and to hold to them consistently. To do otherwise is dangerously confusing.

My specific recommendations for additions and changes to section 205.4 General Definitions follow:

1) "Agricultural Production"

The term "warehousing" should be inserted after "processing" in your present definition. This is necessary to assure that all points in the distribution chain for food are given adequate priority within the fuel allocation program, and that we encounter no health problems from spoilage.

Additionally, as I pointed out in my earlier comments on the Middle Distillates Regulations, I assume that food distribution services include distribution not only to grocery stores but also to schools, social service feeding programs centers, hospitals, nursing homes, and other congregate residential facilities. I suggest that such a clarification be contained in guidelines issued to State Offices or Local Boards.

2) "Emergency Services"

I recommend that this category be struck in its entirety. The addition of "Emergency services" as a category (as opposed to groupings used in the earlier Proposed Middle Distillate Regulations), and the occasional reference to either "Vital" or "Essential" community services in these regulations needs to be clarified. I strongly prefer and recommend that you substitute the consistent use of the categories "Essential Community Services" and "Medical and nursing facilities" as defined and discussed as items (3) and (5) below.

BEST COPY AVAILABLE

3) "Essential community services"

I recommend the following definition:

> "'Essential community services' means services for the protection of public health, welfare and safety, including law enforcement, essential government regulatory functions, utilities, and sanitation; other than for heating purposes."

4) "Local Board"

I recommend that the definition currently in section 130.24 be amended by adding "and act upon" after the word "consider" and by adding the following to that definition:

> "A local Public Health Physician or representative will be an ex-officio member of each Local Board. Such board shall contain consumer representation appropriate to its particular area."

5) "Medical and nursing facilities"

I recognize the changes that you have made in this definition based on my earlier comments. However, I repeat my recommendation that the clause "congregate residential facilities licensed for specific groups of residents such as the aged, children, etc., to the extent required for the health of the patients" be added to this definition. Additionally, I suggest that "facilities" be used instead of "buildings" so that mobile health facilities may be properly included.

6) "School"

In the last sentence of this definition I recommend that you replace "institutions of higher learning" with "post-secondary education facilities." This is the current terminology and provides for a broader exclusion.

7) "State"

As I indicated in my earlier comments, Federally recognized Indian Reservations should be included in the definition of "State." The Reservations historically have had limited relations with States, and could be slighted by the States in allocating their various reserves. Additionally, a number of them are interstate. General [illegible]

BEST COPY AVAILABLE

Sharing recognizes Federal Indian Reservations as State equivalents -- thus the FEC regulations should recognize them as well. It should also be noted that use of the term "Custom Territory of the United States" in the proposed regulations excludes the Trust Territory of the Pacific Islands, as well as the Virgin Islands and our various possessions and territories in the Pacific. Accordingly, the definition should be revised to read:

> "'State' means each of the 50 States, Federally recognized Indian Reservations, the District of Columbia, Puerto Rico, possessions and territories of the United States and the Trust Territory of the Pacific Islands."

8) "Transportation services"

I suggest that the exclusion of tour, recreation, and excursion services which is contained within the Subpart F - Middle Distillates definition for "Transportation services" be adopted within the general definition applied to all regulations. Therefore item (a) under "Transportation services" within Subpart B - Definitions should be amended to add the following after "general public":

> ", but excluding tour, recreation, or excursion services".

I also suggest that item (b) be revised to read as follows:

> "(b) Transportation of pupils to and from school in a school bus."

BEST COPY AVAILABLE

Box 11

9

Subpart C - Crude Oil

Subpart C contains the term "ba e period" in section 200.22 wit ut defining it. This term should e defined in section 200.2, definitions, and should, of course, b consistent with the "base period" definition in Subpart B - Defin tions.

BEST COPY AVAILABLE

Subpart D - Propane and Butane

It is unclear that all 13 categories listed in section 200.35 Allocation are priority, since only 7 of these are in fact designated "Priority" within section 200.34 (b-1) "Priority Customer uses." Additionally, one of those listed in section 200.34(b-1) is omitted from the certified need listing of 200.35 Allocation. This apparent inconsistency should be corrected. Assuming that 200.35 reflects your correct priority listing, I recommend the following changes to that section so that the Propane and Butane regulation will be consistent with my recommendations for Definitions in subpart B:

- In 200.35(d), substitute "Medical and nursing facilities" for "Medical and nursing buildings".

- In 200.35(f), substitute "essential community services for "emergency services, sanitation".

In order that "certified needs" for Propane and Butane be consistent with those which you have already established for Middle Distillates, I recommend that "(k) Schools" be accorded the same treatment as "(a) Residential." Category (k) should read:

> "(k) Schools. 95 per cent of current requirements. When used for space heating, adjusted for degree days or other means for weather adjustment."

With regard to "(m) Petrochemicals", I am concerned about the impact of the "90 per cent of base period" as it affects drugs and supplies needed in the health industry. This across-the-board reduction may very well mean a 20 per cent or more reduction of supply compared to current requirements for disposable plastic supplies such as syringes and intravenous tubing. Given the nature of the control mechanism, a supplier may be expected to reduce all processors in the same manner, including those of vital health supplies and equipment. The potential impact of such actions makes it essential that we monitor this closely and possibly mandate a priority for petrochemicals used to fulfill health needs. I understand that you do recognize this problem and that you are taking steps to assure that the production requirements of essential medical supplies and drugs will be met.

Under section 200.35 I strongly recommend that you further categorize the priorities in a manner which will allow for satisfaction of critical needs where supply cannot satisfy priority demand alone. I suggest that the Category I and II procedure used within Subpart [illegible] be used here, too.

BEST COPY AVAILABLE

Box 13

11

Subpart E - Motor Gasoline

This subpart of the proposed regulations presents severe difficulties in interpreting its intent, and raises serious concerns with regard to its anticipated impact on non-wholesale purchasers of gasoline, particularly those who need gasoline to carry out priority functions and services. I recognize, of course, the difficulties inherent in attempting to allocate motor gasoline equitably, when the system deals only with wholesale levels.

In particular, you should recognize that subsection 200.41(e)(1) of the regulations, which places responsibility on individual suppliers to distribute gasoline equitably among all non-priority users, could have a severely disruptive effect on essential health and social services, particularly in rural areas, and on agricultural production. As you know, "Emergency services" are given priority in subsection 200.40(a), but this priority extends only to wholesale purchasers. Individual providers of emergency services, such as doctors and independent ambulance operators, seem to fit only into the non-priority category, and presumably will have no advantage over all other non-wholesale purchasers at their local gasoline stations. Similarly, migrant farmworkers who travel primarily in private automobiles and whose services are essential to agricultural production; locally based essential community services such as the Meals-on-Wheels program for the elderly; and many other non-wholesale yet essential services are entirely unprotected by the proposed regulations.

Because of this, FEA should emphasize to the public and to its officials charged to administer the program at the state and community levels that there are legitimate priority needs which are not addressed in your present gasoline regulations, yet must be met to assure public health and safety.

Within section 200.39 - Definitions, the necessity for inclusion of a separate definition for "Bulk purchaser" is unclear, as the term is used in no other section of the subpart. The term "Wholesale customer or purchaser" as defined in Subpart B - Definitions seems adequate for the purposes of the Motor Gasoline Regulations.

The definition of "State reserve" is imprecise, particularly when read in conjunction with Sections 200.41(e) and 200.43(b)(3). I suggest that the definition be moved to Subpart B - Definitions, as I mentioned

BEST COPY AVAILABLE

earlier, and that it be revised to indicate clearly what constitutes a State reserve, how its existence is ensured, and whether the Administrator of FEO has authority to transfer reserves between States or only actual or anticipated surpluses.

Although the terms "priority allocation" and "supply" are used throughout this subpart, priority uses are never explicitly identified. Uses in section 200.40 - Allocation should be clearly labeled as priorities. Further, I strongly recommend that the terms used therein be consistent with the priority categories utilized elsewhere in the regulations, as modified by my suggestions earlier in this letter (e.g., substitute "Essential community services" for "Emergency services"), and that as much as possible be moved into the General and Definitions subparts of the Regulations.

The use of "current requirements" in the final sentence of section 200.40(c) is inconsistent with the use of "base period" in subsection (a) of that Section, and should be corrected.

BEST COPY AVAILABLE

Subpart F - Middle Distillates

I appreciate the cognizance taken of my comments on the previously proposed Middle Distillates Regulations. Other than the general comments which I have discussed earlier, and which pertain to all subparts of the presently proposed regulations, I wish to add only a few additional suggestions on Middle Distillates.

"Agricultural production" will receive the highest possible allowance (100 percent of current requirements) under Subpart F - Motor Gasoline, yet is placed in Category II in Subpart F - Middle Distillates. Clearly this activity should be given the same priority throughout the regulations if we are to avoid the anomaly of rationing diesel fueled farm equipment in a different category than gasoline fueled farm equipment. Accordingly, I recommend that "Agricultural production" be reclassified as a Category I activity in section 200.46 - Allocation of the Middle Distillates Regulations and assigned an appropriate "100 percent of current requirements" allocation within that category.

As I indicated in my previous comments, school and other educational institutions may find that an effective fuel conservation measure will be to extend school vacations beyond their base year durations, or to close intermittently throughout portions of the winter. These institutions will essentially be spreading their savings over a number of months, and the regulations should clearly stipulate that savings obtained by an end-user during one month can be added to allocations for that user in subsequent months. Section 200.47(d) addresses this point, but only to the extent that suppliers and purchasers are able and willing to make an arrangement amongst themselves. To provide equitable decision makers a firm and equitable basis upon which to determine the relative merits of school closures as a fuel conservation measure, I believe the regulations must clearly allow savings obtained during one month to be added to subsequent months' allocations. Accordingly, I recommend that Section 200.47 be altered to read:

> "(d) To provide for seasonal fluctuations, e.g., agriculture, construction and education, purchasers may borrow or future allocations or defer current allocations within the level of the total allocations for the year."

BEST COPY AVAILABLE

"Usage Factor" is used in Subpart F - Middle Distillates in application to "a particular building." Institutions which operate more than one building (such as schools) may find that an effective method of fuel conservation will be the consolidation of operations into fewer buildings than they now occupy. It should be made clear that the savings obtained by taking some buildings out of use can be used in remaining buildings to calculate the overall fuel allocation. Accordingly, I recommend that the following sentence be added in section 200.18 as a new subsection "(o)":

> "Where a school system, hospital or other institution occupies more than one building, and they are all under the same administration, that institution may request that one usage factor be computed and applied for all its buildings, in the aggregate, rather than individual usage factors for each."

To be consistent with the definitions which I proposed in my comments on Subpart B - Definitions, priority category identifications within section 200.45 Definitions and section 200.46 Allocations should be amended as follows:

- For "Medical and nursing buildings" substitute "Medical and nursing facilities".
- Change "Emergency services, telecommunications and sanitation" to "Essential community services and telecommunications".

BEST COPY AVAILABLE

Subpart H - Residual Fuel Oil

The Residual regulations, as I have already commented relative to some of the other regulations, do not actually state priorities, although section 200.59 Allocation seems to attempt to do this. Priorities among categories must be clearly established and labeled.

To be consistent with the priority established for Education Space Heating in the Middle Distillates Regulations, I recommend that subsection 200.59(c)(1) be amended to include "Education Heating" along with "Residential". Specifically "Residential" should be replaced within subsection 200.59(c)(1) with "Residential and Education".

"Usage Factor" is used in Subpart H - Residual Fuel Oil in application to "a particular building." Institutions which operate more than one building (such as schools) may find that an effective method of fuel conservation will be the consolidation of operations into fewer buildings than they now occupy. It should be made clear that the savings obtained by taking some buildings out of use can be used in remaining buildings to calculate the overall fuel allocation. Accordingly, I recommend that the following sentence be added in section 200.61 as a new subsection "(f)":

> "Where a school system, hospital or other institution occupies more than one building, and they are all under the same administration, that institution may request that one usage factor be computed and applied for all its buildings, in the aggregate, rather than individual usage factors for each."

To be consistent with the definitions which I proposed in my comments on Subpart B - Definitions, category identifications within section 200.59 Allocation should be amended as follows:

- For "Emergency services" substitute "Essential community services".
- For "Medical and nursing buildings" substitute "Medical and nursing facilities".

BEST COPY AVAILABLE

Box 17

16

Subpart I - Other Products

Given the complex relationships between the products covered in this subpart -- particularly the petrochemical feedstocks -- and eventual end-use products or services, I agree with your decision not to establish allocation priority categories at this time. Should shortages necessitating such controls develop, however, I recommend that the same priority categories proposed for the other subparts of these regulations be utilized for the purposes of this subpart. In particular, of course, it will be essential that medical supply industries receive adequate allocations for the production of essential medical supplies; and that controls established pursuant to this Subpart and Subpart D - Propane and Butane do not unduly interfere with the supply industries' ability to obtain appropriate mixes of their essential requirements of petrochemicals, propane and butane.

The potential impact of shortages in health areas makes it essential that we monitor this closely and possibly mandate a priority for petrochemicals used to fulfill health needs. As I mentioned earlier, I understand that you recognize this problem and that you are taking steps to assure that the production requirements of essential medical supplies and drugs will be met.

BEST COPY AVAILABLE

Senator PELL. Our next panel is concerned with elementary and secondary education, and consists of Dr. Helen Wise, president, National Education Association, Paul B. Salmon, executive director, American Association of School Administrators, Robert Benton, superintendent, Iowa department instruction representing the Council of Chief State School Officers, and Harold V. Webb, executive director, National School Boards Association.

Dr. Wise, and colleagues, we welcome you here.

I think Senator Hughes would like to introduce Dr. Benton.

Senator HUGHES. As a native Iowan, I have a little personal pride in his testimony this morning, and I hope it is of help to the committee.

He is a product of Iowa, and received his degree in the Iowa college system, and served in various capacities of teaching and administration in the Iowa school systems, and was appointed to the position of State superintendent of public instruction in 1972.

I just want to particularly welcome Dr. Benton to the committee.

INTRODUCTION OF DR. WISE

Senator SCHWEIKER. I want to say a word on behalf of Dr. Helen Wise.

Dr. Wise and I attended the same institution. I am inclined to agree that Dr. Wise has been a real leader not only in the country, but in our State, and we are very proud of her as a Pennsylvania citizen and a spokesman for education in this country.

Senator PELL. Dr. Wise will be leading off the panel, and you all have some substantial statements to be put into the record in full.

We are interested in your reaction to the Government witnesses that just spoke, and in what you believe the policy of our country should be.

STATEMENT OF DR. HELEN D. WISE, PRESIDENT, NATIONAL EDUCATION ASSOCIATION; PAUL B. SALMON, EXECUTIVE SECRETARY, AMERICAN ASSOCIATION OF SCHOOL ADMINISTRATORS; ROBERT D. BENTON, SUPERINTENDENT, IOWA DEPARTMENT OF PUBLIC INSTRUCTION REPRESENTING THE COUNCIL OF CHIEF STATE SCHOOL OFFICERS; AND HAROLD V. WEBB, EXECUTIVE DIRECTOR, NATIONAL SCHOOL BOARDS ASSOCIATION, A PANEL ON ELEMENTARY AND SECONDARY EDUCATION

Dr. WISE. Thank you, Mr. Chairman, and members of the committee.

I am Helen Wise, president of the National Education Association.

NEA is the largest professional organization in the country, representing some 1.4 million teachers and other educators. We are grateful to you, Chairman Pell, and members of the subcommittee, for this opportunity to discuss what is happening to schools in the energy crisis.

We are especially mindful of the need for speedy congressional action, which has been dramatically pointed up in the interim since Congress adjourned without enacting a bill, thus leaving the Nation in a state of confusion and indecision.

Those of us who work in the schools know very well that a part of the heat in the schoolroom is body heat from the tremendous energy

resources of the young people. Furthermore, the pupil in the classroom may actually use less scarce energy than the child in a heated home with the color TV or stereo blaring, or the teenager cruising aimlessly in a car.

We question the premise that closing schools will result in a significant net saving of energy.

The National Education Association pledges support of all reasonable and effective means to conserve energy in the operation of schools, so long as such measures are not inconsistent with insuring that pupils get a full year of schooling and that contracts of school employees are honored.

The time of school operation—days and hours—is subject to State law and regulations of State and local governing bodies.

In addition, duration of school operation is, in many States, an item which is negotiated in contracts with teacher associations.

Frequently, schools must be in session the required number of days to receive full State aid. Holidays and hours of daily operation are generally set by the local school boards. The hours of the teachers' day at school and the working year are frequently negotiated.

Some of the means being considered with regard to schools' efforts to conserve energy are obviously less disruptive than others.

Closing for an extended period is probably the most disruptive measure for the pupils, parents, and teachers. Learning progress would be impaired if the school term were interrupted for an extended period. Working parents would have to provide daytime supervision for pupils. Summer work, school and vacation plans of teachers, pupils, and parents would be interrupted.

Wages of school employees on daily or hourly rates would be lost, and teachers' contract salaries would be in question.

The proposed closing of BIA schools late in January is, in our opinion, a prime example of misplaced priorities and shortsighted thinking. The Indian pupils are most in need of an uninterrupted school year.

This is only a proposal. Even the consideration seems rather shortsighted when you realize that of the total 196 BIA schools, 102 are in Arizona, New Mexico, Nevada, Oklahoma, Florida, and North Carolina, where the climate is such that little, if any, results in fuel saving would be accomplished by closing these schools.

The 4-day week would necessitate rescheduling of classes. Pupils and teachers would have to adjust to a longer school day. Some employees on a daily or hourly wage basis would earn less money.

Shortening the hours schools are open during the day would curtail extracurricular activities, supervised study in school, and later regular school adult and community programs.

Closing schools when the temperature is extremely low would be of some inconvenience to pupils, parents, and school employees. The severity of the damage would depend on the number of days schools were closed. In cold climates this would be extremely disruptive.

Fuller utilization of existing transportation facilities and lowering of school temperatures within limits of health and safety would obviously be the least disruptive of the options available.

We recommend that all groups affected by changes in the school schedules participate at the State and local levels when decisions are made to alter the school schedules. These groups include school officials, parents, student advisory groups, and school employees.

NEA's affiliates in every State, representing educators, stand ready to work with Government officials. A unilateral decision from any level of Government affecting school schedules is bound to produce a great deal of controversy.

I must comment that, as is obvious from the previous testimony, the Federal Energy Office has met with Rodeo, Motor Boat Association, Auto Racing Association, but there have been no meetings with the National Education Association. And this concerns us very much.

We are asking Congress and the administration to include schools in the list of priority users of petroleum, gasoline, and other fuels for distribution of scarce products. This request is based on our belief that the education of pupils is of critical importance to the Nation and should not be curtailed or sacrificed to the energy crisis.

This does not imply that schools should not effect all possible savings in consumption of energy. Lowering of temperatures in schools, curtailment of noneducational schedules, rearrangements of bus routes, and rearrangement of school hours and holidays are measures which can be and are being taken with the cooperation of teacher organizations to conserve energy.

However, we do not support delays or curtailments of school integration plans under the guide of conserving fuel.

Again, let me emphasize that we are not asking that schools be totally exempted from the constraints necessitated by the energy crisis. Obviously we realize that all of us are going to have to tighten our belts and put up with inconveniences.

I might add that NEA is doing its part. We are developing teaching materials in a curriculum that will help youngsters, we think.

We are asking that the Congress and the administration recognize the unique qualities and functions of the schools and the need for schools to operate at a near-normal level.

We are ready to cooperate in whatever way possible to insure both short-range and long-range benefits to all of society, which must include the integrity of the education process.

Senator PELL. Thank you very much indeed. I appreciate very much your summarizing your statement as you did.

I must say I agree with you, too, on the importance of making sure that the educational community makes an adequate input into whatever policies we have.

[The prepared statement of Dr. Wise along with supplemental material follow:]

NATIONAL EDUCATION ASSOCIATION • 1201 16th St., N.W., Washington, D.C. 20036 • (202) 833-4000
DR. HELEN D. WISE, President
TERRY HERNDON, Executive Secretary

Statement of

Dr. Helen D. Wise

President

National Education Association

concerning

The Energy Crisis and Education

before the

Education Subcommittee

of the

Senate Committee on Labor and Public Welfare

January 7, 1974

Mr. Chairman and members of the Committee, I am Helen D. Wise, President of the National Education Association. NEA is the largest professional organization in the country, representing some 1.4 million teachers and other educators. We are grateful to Chairman Pell and members of the Subcommittee on Education for this opportunity to discuss what is happening to schools in the energy crisis. We are especially mindful of the need for speedy Congressional action, which has been dramatically pointed up in the interim since Congress adjourned without enacting a bill, thus leaving the nation in a state of confusion and indecision.

The National Education Association pledges support of all reasonable and effective means to conserve energy in the operation of schools, so long as such measures are not inconsistent with insuring that pupils get a full year of schooling and that contracts of school employees are honored.

Teachers are in a unique position in working with pupils and parents to transmit an understanding of the energy crisis, to develop attitudes conducive to the conservation of energy, and to convey information on measures which can be taken to eliminate waste and conserve scarce resources.

Those of us who work in the schools know very well that a part of the heat in the school room is body heat from the tremendous energy resources of the young people. Furthermore, the pupil in the classroom may actually use less scarce energy than the child in a heated home with the color TV or stereo blaring or the teenager cruising around aimlessly in a car. We question the premise that closing schools will result in a significant net saving of energy.

As teachers, we were angered by the low priority President Nixon placed on schools in his energy message to the nation on November 8, 1973, when he said that among the steps he advised Governors and Mayors to take was the alteration of the school schedule. We feel that schools must have a priority high enough to insure continued operation even with reasonable savings to conserve energy.

At its meeting last November, the NEA Board of Directors requested staff to prepare curriculum materials for classroom use in teaching about the energy crisis. As a first step, NEA's Instruction and Professional Development staff has compiled an energy crisis bibliography of teaching materials and helpful publications. A copy of this publication, which teachers can obtain free, is attached. Over 8,000 copies have already been mailed. In addition, a package of materials for use in the classroom for teaching about conservation of energy is being prepared for distribution to our members and others.

On November 18, in a letter to the President's energy adviser at the time, Governor John Love, NEA President-Elect James Harris pledged NEA's support of the national appeal to conserve energy. Mr. Harris requested a meeting to explore solutions to the crisis as it affects schools and recommended that state and local governing bodies avoid unilateral decisions related to the energy crisis and instead consult with organizations that represent school employees to devise plans to conserve energy with minimal disruption of the education programs. The offer has been repeated to the new energy administrator. To date, there has been no response to this offer of cooperation and assistance.

The time of school operation -- days and hours -- is subject to state law and regulations of state and local governing bodies. In addition, duration of school operation is, in many states, an item which is negotiated in contracts with teacher associations. Frequently schools must be in session the required number of days to receive full state aid. Holidays and hours of daily operation are generally set by the local school boards. The hours of the teachers' day at school and the working year are frequently negotiated.

A number of changes in school operation are being considered in state and local school systems for the purpose of conserving energy.

-- closing of schools for an extended period of up to two months, with lost time to be made up on Saturdays, scheduled holidays, conference days, and by extending the regular school

year into the summer months

-- adopting a four-day week and extending the school day so that the school week of four days includes the same number of instructional hours as the current five-day week

-- shortening the time schools are open during the day by eliminating after-school extracurricular activities, community programs, and adult education programs

-- closing schools on a day-to-day basis when the temperature is at a specified low degree with lost days to be made up later in the school year

-- revising transportation schedules to reduce fuel consumption, including elimination of special runs for kindergarten pupils and after-school hours' activities

-- lowering the temperature of the school rooms and changing the schedule for heating the school to increase the hours the temperature is reduced to minimum maintenance levels

Some means to conserve energy are obviously less disruptive than others.

o Closing for an extended period is probably the most disruptive measure for the pupils, parents, and teachers. Learning progress would be impaired if the school term were interrupted for an extended period. Working parents would have to provide daytime supervision for pupils. Summer work, school, and vacation plans of teachers, pupils, and parents would be interrupted. Wages of school employees on daily or hourly rates would be lost, and teachers' contract salaries would be in question.

  The closing of BIA schools until late in January is, in our opinion, a prime example of misplaced priorities and short-sighted thinking. The Indian pupils are most in need of an uninterrupted school year.

o The four-day week would necessitate rescheduling of classes. Pupils and teachers would have to adjust to a longer school day. Some employees on a daily or hourly wage basis would earn less money.

o Shortening the hours schools are open during the day would curtail extracurricular activities, supervised study in school, and alter regular school adult and community programs.

o Closing schools when the temperature is extremely low would be of some inconvenience to pupils, parents, and school employees. The severity of the damage would depend on the number of days schools were closed. In cold climates this would be extremely disruptive.

- Fuller utilization of existing transportation facilities and lowering of school temperatures within limits of health and safety would obviously be the least disruptive of the options available.

We recommend that all groups affected by changes in the school schedules participate at the state and local levels when decisions are made to alter the school schedules. These groups include school officials, parents, student advisory groups, and school employees. NEA's affiliates in every state, representing educators, stand ready to work with government officials. A unilateral decision from any level of government affecting school schedules is bound to produce a great deal of controversy. Governor McCall of Oregon rescinded his order to close schools as has the State Board of Connecticut under public and teacher association pressure and, in the latter case, an adverse ruling by the State's Attorney General.

Last month NEA's teletype News Service surveyed by telephone all state education associations to determine what is happening in the state school systems to conserve energy. A full report of this survey is attached. I'd like to highlight some of the report.

1. Most states and local school systems have moved cautiously because of the lack of information on how much fuel must be saved, how much is available, and uncertainty about the legal status of their authority. We do not expect state and local plans to be completed until sometime in 1974 when state legislatures are convened.
2. The consumption of heating fuel by schools was reported down this winter to date largely because of unseasonably warm temperatures this fall. Some states, especially those which produce their own supply of oil, hydro-electric power, natural gas, or coal, do not anticipate any shortage of fuel for heat. Areas where schools are heated by natural gas on interruptable contract are anticipating serious problems.

The supply of fuel for buses is reported to be more critical and more expensive. Rural areas which must bus long distances and districts which depend on commercial stations are especially hard hit.

We are asking Congress and the Administration to include schools in the list of priority users of petroleum, gasoline, and other fuels for distribution of scarce products. This request is based on our belief that the education of pupils is of critical importance to the nation and should not be curtailed or sacrificed to the energy crisis. This does not imply that schools should not effect all possible savings in consumption of energy. Lowering of temperatures in schools, curtailment of non-educational schedules, rearrangements of bus routes, and rearrangement of school hours and holidays are measures which can be and are being taken with the cooperation of teacher organizations to conserve energy. However, we do not support delays or curtailments of school integration plans under the guise of conserving fuel.

Inclusion of schools in the list of priority public services in the legislation and regulations covering the distribution of energy sources is essential to guaranteeing the supply to schools in areas where supplies are scarce.

A ten percent cut in fuel over last year could, in most cases, be compensated for in ways previously cited. However, there are many schools which do not have guaranteed delivery of even that amount and may have to close for extended periods. We do not believe that losses of instructional time coming in the middle of the school year can be made up.

Again, let me emphasize that we are not asking that schools be totally exempted from the constraints necessitated by the energy crisis. Obviously we realize that all of us are going to have to tighten our belts and put up with inconveniences. But we are asking that the Congress and the Administration recognize the unique qualities and functions of the schools and the need for schools to operate at a near-normal level. We are ready to cooperate in whatever way possible to insure both short-range and long-range benefits to all of society, which must include the integrity of the education process.

INFORMATION ipd

on instruction and professional development from the National Education Association
1201 Sixteenth Street, N.W., Washington, D.C. 20036

November 1973

Energy Crisis Materials
An Annotated List of Resources for Teachers

Social studies, science, political science, math, history, driver education -- almost every subject can contribute something to a study of the developing fuel shortage and its worldwide implications for food, clothing, transportation, and housing. The references included here represent some of the useful materials now available. As additional material is published, this listing will be expanded. In the meantime, suggestions from teachers will be most welcome. We'd like to hear about instructional materials you have found to be particularly useful in teaching about some aspect of the energy crisis. And of course we'll be interested to have your reactions to the references included here.

--IPD Staff

Citizens' Advisory Committee on Environmental Quality, Citizen Action Guide to Energy Conservation. Washington, D. C.: September 1973, 64 pp. The book is directed to citizen leaders, public officials and others who are in a position to promote understanding of the need for energy conservation and to encourage its practice on a broad scale by the American people. Chapters include: Citizens Can Help Save Energy; Energy in the United States and Its Impact on the American Family; Conserving Our Transportation Energy; Energy Conservation in Our Homes and Offices; Conserving Industrial and Electrical Energy; Toward a National Policy of Energy Conservation; Citizens Can Mobilize for Energy Conservation--How to Start; What to Do; and Whom to Talk to. Selected references and a glossary of commonly used terms are included.

Council on Environmental Quality. Energy and the Environment - Electric Power. Washington, D. C.: Government Printing Office, August 1973. 58 pp. This report considers the elements underlying the growing

This material has been prepared to assist members of the united teaching profession in their quest for professional excellence. More information is available from your local NEA representative and the NEA's Information Center on Instruction and Professional Development.

27-783 O - 74 - 7

demand for energy and the environmental implications of complex energy systems for meeting this demand. It focuses on electric energy because of the particularly rapid growth in this sector. Chapter I discusses trends in the nation's demand for energy and the supply systems for meeting this demand. It also points out the environmental damages resulting from energy use. Chapter II focuses on electric power and the environmental impacts of the fossil-fueled and nuclear systems in use today. Chapter III points out that improved efficiency of energy systems and energy conservation will reduce environmental damages and slow our use of energy resources. Chapter IV shows how electric energy demand forecasts can be combined with data on the environmental impacts of each electric energy system to yield an estimate of projected environmental consequences.

The Economy of Energy Conservation in Educational Facilities. New York: Educational Facilities Laboratories, 1973. 81 pp. "The Energy Crises for schools will last through the Century" and school administrators must face the problem squarely in their maintenance and planning problems. This is the theme of the Educational Facilities Laboratories report. It stresses the ability of school administrators to affect conservation of energy. Immediate steps should include reviewing operation and maintenance personnel for their ability to cope with increasingly sophisticated equipment in schools; identifying sources of energy waste; and including energy conservation as a major part of modernization or new construction.

The Monday Report - Weekly Newsletter, "Energy Crisis," VIII: 1 p; November 12, 1973. (Department of Education, Tallahassee, Florida 32304.) Commissioner Floyd T. Christian sent a memorandum to all district school superintendents, community college presidents, and university presidents urging cooperation in the campaign by federal and state governments to conserve energy. Memorandum suggests methods under voluntary programs by which electricity, oil, gasoline and coal may be conserved.

National Fuel and Energy Policy Study - Publication List. Prepared by the Committee on Interior and Insular Affairs, United States Senate-S. Res 45, Washington, D. C.: Government Printing Office, November 1973. 6 pp. This document is published to assist members of the Committee and other interested parties in their understanding of the issues inherent in the formulation of a long-term National Energy Policy which assures the continued welfare of the nation, including balance growth, safeguarding and enhancing the quality of the environment, and national security.

ARTICLES

"Airline Cuts - Double Saving," Newsweek, p. 92; November 12, 1973. According to airlines, the reduced service will not seriously inconvenience travelers. But the cutbacks may prove to be a blessing. One analyst estimates that the industry can save $250 million as a result of flight cancellations before adjusting for higher fuel costs.

"Dirty Black Ace in the Hole," Newsweek, 93-94; November 12, 1973. As the Arab oil squeeze tightens, the nation's energy experts are seeking

quick solutions to the U. S. fuel shortage. And inevitably the talk leads to coal. "Coal is our ace in the hole." America has an abundance of coal resources. Various problems related to coal digging such as safety, health, and method are discussed.

The Energy Dialogue. A simulation to help teachers and students "get into the energy crisis" is based on presentations and discussions by high school students, teachers, and environmentalists at a meeting this summer in New England. It will be ready for distribution in December 1973. Teachers can write to: Education Department, Conservation Foundation, 1717 Massachusetts Avenue, N. W., Washington, D. C. 20037.

"Interview With John A. Love, White House Energy Chief." U.S. News & World Report, Vol. LXXV, No. 20: 96-100. (a part of Winter Fuel Shortage--How Bad?) The main answer is: "Even without Arab boycott, a very tight situation." Expected to be among the hardest hit, says White House Energy Chief, John A. Love, are the East Coast, particularly New York State and New England and the upper Midwest.

Freeman, S. David. "The Energy Crisis, What Makes It So Complex." Vital Issue, Vol. XXIII, No. 3: p. 6; November 1973. The material was prepared primarily for fourth to sixth graders. Teacher's guide and four spirit masters are also included. Single copy of these materials is available free by writing to Standard Oil Company of Indiana, 910 South Michigan Avenue, Chicago, Illinois 60605.

Freeman, S. David. "The Energy Joyride Is Over," Science and Public Affairs, Vol. XXIX: 8; 39-40; October 1973. The author says: "Our energy joyride is over. For the next several years we will have to face up to some tough realities about energy supply and use." It is projected that by 1985 the total energy requirements will be about 70 percent greater than today, but the domestic supplies of oil and gas will be little increased. However, according to the author, this large gap can be overcome by one of the following paths: (1) Energy consumption - better insulated buildings, small cars. More mass transit and more efficient use of energy by industry; (2) Expanded use of nuclear power - it has limitations and problems; (3) Use domestic source of energy - coal is a large source of energy. Their problem may be improved by improving methods and control technologies to remove sulfur, etc. Coal and oil could be converted to clean liquids or gas by 1980 and beyond.

Goldmark, Peter C. "A Rural Approach to Saving Energy: Technology Could Help Ease Urban Congestion." The New York Times, Sunday, November 11, 1973. The author feels that "it is important now to start thinking not just of turning off switches or research in energy source, but of reversing the sorry trends of society - particularly the steady crowding of people into urban centers where more energy is constantly needed." (A shift of present trend toward the city back to the country.) What the author proposes is that the advances of telecommunications technology--satellites, cable TV, broadband circuits, and similar devices--make it possible to attract future generations into the smaller towns of America beyond the commuting dependency range of the big city and suburbia and thus cut

down on the excessive use of power.

Mancke, Richard B. "Blackmail by Oil," The New Republic, 169; 16: 8-9, October 1973. The author analyses the gain or loss of Arabian States' boycott and indicates that if Arab oil producers agree to punish U. S. for its pro-Israel position, it cannot work. Some non-Arab OPEC oil that would otherwise be consigned to Western European or Japanese ports would simply be diverted to the U. S., and it would be replaced by oil formerly shipped here. It is true that Western Europe and Japan are far more dependent than U. S. on import by OPEC oil and would suffer the severest shortages and pay the high list price for an embargo of Arab sales. But the Arab States would also be large losers from a politically motivated embargo for they would give up high-profit oil sale.

The Snoopy Kit, Department of the Interior, Office of Energy Conservation, Room 465, 18th and E Streets, N. W., Washington, D. C. 20240. The kit includes various pamphlets and brochures on how to conserve energy.

"Winter Fuel Shortage: How Bad." U.S. News & World Report, Vol. LXXV, No. 20; 17-20; November 12, 1973. If winter is severe, widespread trouble is sure. The impact and duration of the energy crunch hinges on two unknowns--how long the Arab oil boycott continues, and how bitter the weather will be this winter.

* *

Too late to annotate, the following items are included because of their relevance:

Brown, Lester R. The Interdependence of Nations. Foreign Policy Association, Inc., 1972. (Available for $1.00 from the Association, 345 E. 46th Street, New York, N. Y. 10017.) Also available from the same source is The Energy "Crisis" and U. S. Foreign Policy by Robert E. Hunter, 1973. $1.25.

Two recent articles in Vital Speeches of the Day: "Middle Eastern Oil: European Security" by Arnand de Borchgrave, September 15, 1973, pp. 716-19; and "The Energy Dilemma" by John E. Swearingen, October 1, 1973, pp. 750-53.

A Fact Sheet on "Energy and the Environment," U. S. Environmental Protection Agency, Office of Public Affairs, Washington, D. C. 20460 (free).

Impact of Gasoline Marketing Practices on Consumer, U. S. Government Printing Office, 1973. (Available for 50¢ from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.)

Nader, Ralph. "It's A Gas," The New Republic, May 12, 1973. pp. 16-17.

Knapp, Clifford, and Seim, Stuart S. Bulletin Boards for Environmental Studies, The Instructor Publications, Inc., 1973. (Available from the publisher, Dansville, N. Y. 14437.)

Do It Yourself Ecology. A brochure and a bi-weekly newsletter carrying regular articles on the energy crisis. Available from Environmental Protection Agency, 1346 Connecticut Avenue, N. W., Washington, D. C. 20036. (25¢ per copy - $7.50 for 24 issues.)

Office of Elementary and Secondary Education, Smithsonian Institution, Washington, D. C. 20560. Write for a copy of the 24-page "Selected Resources for the Study of Human Ecology: Perspectives on the Environmental Crisis."

The Energy Industry

The American Petroleum Institute, 1801 K Street, N. W., Washington, D. C. 20006. Write for "A Consumer's Guide to Effective Energy Use in the Home" and other materials from the oil industry.

Educational Service Division, The American Gas Association, 1515 Wilson Blvd., Arlington, Virginia 22209. Write for copies of New Sources of Gas: Where and When as well as reprints of the four-page ad, "The Energy Shortage: What it Means to you."

Public Affairs Department, Amoco Oil Company, Executive Park Drive, N. E., Atlanta, Georgia 30329. Ask for "The Energy Shortage: Our Side of the Story."

Shell Information Service, Shell Oil Company, P. O. Box 2463, Houston, Texas 77001. Information and teaching aids on oil and related subjects.

For booklets: "Questions and Answers on Energy" and "Energy and the Nation's Environmental Timetable," write to Mr. Glade, Exxon Company, P. O. Box 2180, Houston, Texas 77001.

For the pamphlet, "Outlook for Energy in the U. S. to 1985," write to John Winger, Vice President, Energy Economics Division, Chase Manhattan Bank, One Chase Manhattan Plaza, New York, N. Y. 10015.

Audiovisual Materials

Motion Pictures:

ENERGY IN NATURE (20 min., b&w, film optical sound). Explains that all of the energy reaching the earth originates from the sun and that a great energy cycle is produced, linking all natural processes on earth. Shows that the sun's energy causes plants to grow, providing food which in turn becomes the 'fuel' providing bodily energy. Pictures wind-powered generators.

ENERGY INTO WORK (20 min., b&w, film optical sound). Examines the efficiency of energy transformations from one form of energy to another. States that the total energy in the environment is constantly changing. Demonstrates the two kinds of energy--kinetic energy and stored energy.

ENERGY AND ITS FORMS (10 min., sd., b&w, Coronet Instructional Films, 65 E. South Water Street, Coronet Building, Chicago, Illinois 60601.)

Defines energy, indicates the many differing forms of energy, giving examples of each, and shows that energy can be changed from one form to another.

ENERGY AND ITS TRANSFORMATION (11 min., sd., b&w, Encyclopedia Britannica Educational Corporation, 425 North Michigan Avenue, Chicago, Illinois 60611.) Defines potential, kinetic, and radiant energy as manifested in mechanical, electrical, chemical, and thermal forms.

ENERGY AND LIFE (20 min., color, film optical sound, Modern Learning Aids Division of Ward's Natural Science, P. O. Box 302, Rochester, N. Y. 14603.) Presents basic physical laws. Discusses transfer of energy among living organisms and develops the basic biological concepts of eltrophy.

ENERGY AND MATTER (8 min., sd., color, McGraw-Hill, 1221 Avenue of the Americas, New York, N. Y. 10020.) Uses animation to demonstrate the interchanging of energy and matter.

NUCLEAR ENERGY--OUR SOURCE OF ELECTRICITY (22½ min., sd., color, Swiss Atomic Energy Association, 2 Barenplatz, Berne, Switzerland.) An introduction to the how, what, and why of nuclear power as the newest energy source for generating electricity.

Filmstrips:

ENERGY AND THE EARTH Series -- Earth: The Early Years, Part I (11 min., 56 frames, sd., color, cassette); Earth: The Years of Decision, Part II (17½ min., 69 frames, sd., color, cassette). Lyceum Productions, Inc., P. O. Box 1226, Laguna Beach, Calif. 92652. Views the earth from the origins of the solar system through its geological and biological development. Develops a fundamental understanding of our plant's energy resources and how they have been and are being expended. Environmental effects are carefully considered.

ENVIRONMENTAL CRISIS -- A series of color filmstrips dealing with a variety of environmental topics. Open-ended, problem-oriented interdisciplinary presentations for secondary school health and science courses and for professional preparation programs. (AAHPER/Publication Sales, NEA Center, 1201 - 16th St., N. W., Washington, D. C. 20036.)

Set #1--Ecological priorities, pollution, animal wastes and population. Five 35mm filmstrips, five LP records, and script. Cassettes are also available.

Set #2--Industrial wastes, the energy crisis, consumer and community action, occupational health hazards, and economic considerations. Five 35mm filmstrips, five LP records, and script. Cassettes are also available.

Set #3--Industrial water pollution, the urban environment, the energy crisis: nuclear power, endangered species, and health effects of water pollution. Five 35mm filmstrips, five LP records, and script. Cassettes are available.

NEA NEWS

NATIONAL EDUCATION ASSOCIATION
PRESS, RADIO, AND TELEVISION RELATIONS
WASHINGTON, D.C. (202)833-4484 NEW YORK CITY (212)LT 1-2360

For Further Information:
Mel Hayes --(202) 833-4484
Rozanne Weissman

FOR IMMEDIATE RELEASE

Energy Crunch Beginning to Hit
Schools, NEA National Survey Shows

WASHINGTON, D.C.--The energy crisis has begun to affect the nation's schools, as four states extend school Christmas vacations statewide to conserve fuel, other scattered large and small localities and colleges follow suit, and only public and legal protests have stopped similar or even more stringent actions elsewhere, according to a National Education Association survey of its 50 state affiliates.

Christmas vacation is being extended a few days in Delaware, Maryland, Maine, and New Jersey. Lost time will either not be made up or be made up during the former spring vacation or at each local district's convenience. Following state task force recommendations, Delaware schools will also extend two February holidays into four-day weekends by declaring Feb. 1 and 15 "energy conservation days" and making up time by cancelling a "teacher day" and adding another day to the school calendar.

Elsewhere, most action thus far is on a local option basis, with state education departments communicating suggestions and, in some instances, requiring formal local district fuel conservation plans for reductions ranging from 15 percent in Washington state and Texas to 25 percent in Massachusetts. Schools are cooperating in innumerable ways: lowering thermostats to 68 degrees, shutting down standby boilers, cutting down on electricity, limiting or cutting our extracurricular, athletic,

(More) 12/19/73

Energy Crunch Beginning to Hit
Schools, NEA National Survey Shows

and evening activities, installing better insulation, reducing bus transportation, serving cold lunches occasionally, allowing closings for cold days, and changing school hours after Daylight Savings Time becomes effective Jan. 6 so that students will not go to school in the dark.

There is also extensive talk--but as yet no implementation--of such drastic contingency measures as a four-day school week. The NEA and its affiliates point out that even during World War II when shortages were worse, schools maintained their normal programs. They emphasize that closing schools should be one of the last ways to save fuel, not the first; they request school priority status in fuel allocation; and they stress that teachers must be involved in decisions concerning student learning.

SCHOOL CLOSINGS PROTESTED LEGALLY, PUBLICLY

The authority of a state education agency to mandate unilateral school calendar changes is being questioned in a number of places. Connecticut's acting education secretary Maurice Ross proposed closing schools Dec. 14 through Jan. 13 but relented when protesters jammed a public hearing. A less stringent plan which would have extended vacation by three days and ordered 4 p.m. closings was adopted, but the state attorney general ruled that the state board does not have power to make such orders.

In Texas, a proposed one-hour-a-day cut in the school day during a three-month emergency period was abandoned because of public protest.

More than 30,000 protest letters persuaded Oregon Gov. Tom McCall to reconsider his proposal to extend school Christmas vacation. This, the first such major school energy-saving proposal in the nation, was hailed by President Nixon on nationwide TV as a fine example for conserving fuel. But the Oregon Education Association retorted by questioning priorities when schools were singled out before less vital institutions and countered--as did teachers who

were surveyed in New Mexico--that students would also be using energy outside of schools: with cars, heat, stereo, and TV, for example. Maryland's state legislature became the first in the nation to give a governor sweeping energy crisis powers, including the closing of schools. Gov. Marvin Mandel's action to extend the school holiday has since been termed "sexist" by working mothers. The executive order now carries with it a special plea that employers of working mothers be reasonable about the problems caused by such school closings.

WEATHER, CREDIBILITY GAP RESPONSIBLE FOR INACTION

Respondents to the NEA survey report that the current school situation is very fluid since statewide and local task forces are working on proposals and many state legislatures convene in January for emergency or regular sessions. As one respondent sums up: "There is alarm. There is concern. But there is more speculation than action at this point." A Michigan Education Association survey, for example, indicated that a quarter of the districts in the state have a fuel problem, but few have developed plans to cope with it. Two primary factors are credited by respondents for inaction or limited action thus far on some state and local levels: unseasonably mild temperatures through mid-December and the crisis in confidence in the current federal Administration.

As Ronald DiOrio, president of the Rhode Island Education Association and a member of that state's Energy Crisis Commission, observes: "The public here is still skeptical about the energy crisis. Perhaps if it were someone besides Nixon in the White House, they would believe it." DiOrio reports that the RIEA Delegate Assembly on Nov. 12 voted for only two resolutions: establishment of a statewide task force to study the energy crisis and the schools, and support of House Judiciary Committee proceedings to determine, by due process, matters concerning the conduct of the President. "The feeling," says DiOrio, "was that the resolutions may seem unrelated but are actually intertwined."

12/19/73

Energy Crunch Beginning to Hit
Schools, NEA National Survey Shows

Echoing DiOrio's sentiments, Donald Krahn, a Wisconsin staff member in UniServ--NEA's unique tripartite local-state-national staffing program--notes, "The Wisconsin public is doing what it is asked to save energy, but they do not seem sure there is a problem. There is a credibility gap between what is said in Washington and what is."

CONGRESS NOT IN TUNE WITH BUSING SITUATION

The U.S. Congress also came in for some knocks in the credibility area on the NEA's energy crisis survey. While both the Senate and the House have spent extensive time debating amendments to energy crisis measures which would limit school busing to neighborhood schools, no state association in the South or elsewhere reported any such strong sentiment in their state, whether for segregation or other purposes. Says C. J. Duckworth, executive secretary of the Mississippi Teachers Association-NEA, "I know some of our congressmen are backing such a resolution, but there doesn't seem to be much support for it here." And a Georgia staffer who notes that the state is "often painted as a hotbed of racists" relates that "not a word has been said on this issue (busing) here."

Furthermore, Richmond, Va., schools, which are now under court order to bus, say that they will close schools entirely rather than stop busing and violate the order. A federal district court has already ordered Exxon to provide enough gas to Memphis, Tenn., schools to implement a court-ordered school desegregation plan, and the courts intervened when the Oklahoma City school board tried to eliminate that district's busing program because of the energy crisis.

Energy Crunch Beginning to Hit
Schools, NEA National Survey Shows

GASOLINE CRUNCH TO HIT RURAL, LARGE DISTRICTS HARDEST

This is not to say that the gasoline and diesel fuel shortage and price rise do not have educators concerned, for survey respondents most often single this out as the biggest overall anticipated energy problem in their state at this point. But the education associations very clearly point out that busing for desegregation purposes is basically minimal overall and that the real crunch will hit both rural and large school districts which bus extensive distances. Two rural districts in Utah, Box Elder and Cache, have already raised the possibility that they may have to close if they cannot get enough fuel for long-distance busing.

A number of school districts already have had trouble at some point obtaining sufficient fuel to operate their buses, such as Ft. Worth, Tex., and Tumwater, Wash., where citizens initiated a "save our buses" campaign. And Payette, Idaho, schools asked the State Board of Education for permission to have a four-day week primarily to save gasoline, but the board deferred action until its January meeting.

Again, the question of priorities comes up. Wilson Riles, state superintendent of public instruction in California where 13,000 school buses log 171 million miles annually, and where vendors can get only 90 percent of last year's gasoline allocation, emphasizes: "Those who set priorities for fuel should understand that there is a big difference between a gambler's bus taking gamblers to Reno and a school bus taking youngsters to school."

(More) 12/19/73

Energy Crunch Beginning to Hit
Schools, NEA National Survey Shows

Rising gasoline prices, on top of high-priced fuel and numerous other increases faced by financially plagued schools, also have educators concerned. The Alabama Education Association reports that schools are able to get gas now but must pay the going retail rate at gas stations--twice as costly as gas wholesale through bids. And NEA-New Mexico staff met with that state's transportation director, obtaining assurance that the legislature would provide extra money to cover higher gas costs.

Because of the shortage and price of gasoline, the following proposals and actual changes have already been made in a number of school districts across the country: elimination of late busing following extracurricular activities, elimination of field trips, enforcement of existing rules not to transport students living within a one- or two-mile vicinity, discontinuance of use of school buses to transport anyone other than athletes to sporting events, consolidation of bus routes and reduction of bus stops so that students have to walk farther to pick-up points, extension of kindergarten classes so as to eliminate special buses, reduction in driver education programs, encouragement of teacher car pools, and bans or strong suggestions against students' driving to school unless necessary. It is rumored that some enterprising students in Oklahoma have turned to a different, dated form of "horsepower" to get to school: horses.

THE DISPARATE HEATING FUEL PICTURE

The school heating fuel picture is highly disparate from state-to-state and locality-to-locality, depending on the location, weather--the worst is yet to come--type of fuel used, and suppliers and their fuel situation problems.

12/19/73

Energy Crunch Beginning to Hit
Schools, NEA National Survey Shows

In Southern and border states, few problems are anticipated because many school districts still use coal. Northwestern states, plagued with a drought and serious hydroelectrical problems in summer, are now in better shape because of rains. In Colorado, which last winter was one of the few states to experience school closings because of the energy crisis and cut-rate interruptible fuel contracts, the affected school districts have learned their lesson, purchased and filled large fuel storage tanks, and are ready for cold weather.

And in warmer weather states: the Florida Education Association says it is praying for warm weather in the northern part of the state to avoid serious unemployment and southern migration; the Hawaii State Teachers Association anticipates that the big problem will be wresting a share of the short supplies of gas and fuel for electricity from the military; and Arizona hopes that there will be no winter school closings to extend the school year into the airconditioning season.

Then, too, some states expect few problems because they themselves are large fuel producers. Utah, which had a hard winter last year, feels that they are in good shape on oil since last year's allocation was accordingly high. The Wyoming Education Association points out that the state produces gas and gasoline, is the nation's fifth largest oil producer, has a large coal potential, and "only has 340,000 people in the whole state to heat."

Nebraska says its natural gas can't be given to anyone else since the pipes only come to Nebraska. And in Oklahoma some politicians reportedly are saying that the state's oil and gas supply should be used to take care of Oklahoma first.
In Louisiana, teachers lucked out because of the energy crisis and got a 5.5 percent cost-of-living raise effective Jan. 1 when the legislature increased the severance tax on oil and gas at the wellhead, which will generate some $300 million for the state's treasury.

12/19/73

Energy Crunch Beginning to Hit
Schools, NEA National Survey Shows

But in New Mexico, although much of the propane-butane gas comes from school trust lands, the schools get only four cents a gallon royalties at the wellhead from the oil companies at frozen prices and then must buy back the same product at 25-30 cents a gallon. And, in addition, schools could be short 24 percent.

New Hampshire expects to be hard hit in every area, Connecticut expects to hurt because the state depends on fuel oil for 72 percent of its electrical power needs compared to 15 percent nationally, and 91 of Indiana's 310 districts say they fear running out of heating oil because they cannot get delivery guarantees. Two Kansas districts, Osawatomie and Paola, had interruptible gas service cut off for several days as classes continued in 40-45 degree temperatures. Kansas City, Mo., is closing down three or four elementary schools and consolidating them with others since it can only get 80 percent of last year's allocation at a cost of 73 percent more. Iowa feels it can make it through the winter if the federal government lets the state emergency pool supply distribution system operate as it has in the past. It aided 60 communities last winter.

In Minnesota, some 75 percent of the school districts anticipate fuel problems, and the State Department of Education has asked school districts to form local advisory committees broadly representative of the community to work out emergency measures. A moratorium has been called in that state on all extracurricular activities, concerts, athletic events and practice sessions from Dec. 22 to Jan. 6. Games will be rescheduled after that period to allow for practice sessions. In Maine, all holiday basketball practice sessions have also been cancelled and a violation would ban a school from the basketball tournament. The sports ban is being taken to court in sports-minded Waterloo, Iowa, where all athletic events will be cancelled from Dec. 22 to Jan. 2.

Energy Crunch Beginning to Hit
Schools, NEA National Survey Shows

THE LEGAL PROBLEM WITH SCHOOL CLOSINGS

Most respondents agreed that non-instructional programs should be first to go and that scheduling changes in the school day, week, or year should be implemented only as a last resort. Such changes are difficult in many states because state law mandates the number of days for school operation and ties school financial aid to local districts to the basis of roughly a 180-day school year. Days would thus have to be made up most often in summer when schools are too hot for optimum learning. Some states have already anticipated this problem: the Kentucky State Board of Education is preparing emergency legislation authorizing the board to redefine the school day, month, and year; legislation has been introduced in Illinois so that schools would not be fined for falling short of the required minimum school year; Texas schools have been assured that their accreditation and state financial support will not be affected because of shorter hours or closings during the three-month emergency period; and legislation is proposed in South Dakota to amend the interpretation of a "day in session" to enable up to 10 planned independent study days at home to be counted as days in session. In New Hampshire, a local district which closes would later apply to the state board for approval to drop to 170 days from 180. Teachers and administrators would report to school to avoid taxpayer suits but be consolidated into one building to work on lesson plans and curriculum during closings.

WHY SCHOOLS?

But the question of school closings, as far as respondents are concerned, boils down to a question of "why schools?" suggests Curtis Plott, executive secretary of the Illinois Education Association. "Business seems to get more favorable treatment by this business-oriented Administration as brought out by recent revelations about payoffs. Educators have learned not to expect good treatment

from this Administration. After all, President Nixon has already vetoed four education bills as inflationary and only agreed to sign the recent one because he has the right to hold back some funds. But we must ask, 'What are the priorities of this country if the first buildings closed in a fuel shortage are our schools?' It is absurd for those who are concerned about the nation's welfare to discuss closing schools before non-essential businesses such as bowling alleys and theaters, and some stores are still open 12 or more hours a day." And William Hebert, executive secretary of the Massachusetts Teachers Association, adds: "Closing the schools would result in negligible savings while creating many more problems than it could conceivably solve."

A teacher survey by the Wisconsin Education Association indicates that teachers are willing to sacrifice with the rest of the population. And in South Dakota, the association's executive secretary, Robert Hald, emphasizes: "Teachers are ethical persons and are willing to do their part. But they have a right to question any proposal which affects the schools and their right to perform their duties if the same restrictions are not placed on other institutions."

The Wisconsin and the Michigan associations are poles apart in their viewpoints of what should close first. The WEA has told the governor that during the energy crisis it would be less harmful to close factories than schools because workers can get unemployment compensation while teachers cannot. The MEA, on the other hand, feels that it cannot strongly oppose school closings since schools can be rescheduled more easily and, otherwise, numerous other workers might have to be laid off.

However, some respondents remark that school closings could be self-defeating since schools' fuel allocations for months while closed could be given to other users and not be saved for the district by the supplier since monthly oil allocations in 1974 are to be simply a percentage of the equivalent month in 1972.

The Ohio Education Association is on record as opposing any school closings that are done only as a gesture to dramatize the energy problem. Byron Hansford, executive secretary of the Council of Chief State School Officers, asserts, "What we do not need are crusading politicians who are willing to sacrifice the educational level of children for the sake of publicity."

WHY THE ENERGY CRISIS?

Although some state association officials wonder how the energy crisis came about with so little advance warning and they take some potshots at the current Administration for this, only two associations have called for any actions which go somewhat beyond the school and learning situations. California Teachers Association president Bryan Stevens is writing President Nixon requesting that oil companies be stopped from exporting oil and that this fuel be allocated for educational needs on a priority basis in this country.

But the Pennsylvania State Education Association (PSEA) adopted by far the strongest resolution. Going beyond other states' school concerns and emphasis on priority for education, PSEA convention delegates in a 13-part resolution, supported Ralph Nader in urging the federal government to subpoena the records of the 20 major oil companies to determine if they have capped oil wells which could have a potential yield of approximately 100 million barrels of oil. They also called for a study of the amount of oil that is being exported by American oil companies, both commercially and for military purposes, particularly to South Vietnam, and urged an investigation of the allegation that the large oil companies are prohibiting use of their pipelines to transport oil from the western United States.

27-763 O - 74 - 8

Energy Crunch Beginning to Hit
Schools, NEA National Survey Shows

CREATING NEW CURRICULUM MATERIALS

Students who have grown up in a land of plenty are surprised about the energy crisis, and teachers have to deal with this complex subject in class. To aid them, various state associations have produced, or are cooperating with state officials in preparing, classroom materials. Such materials have been used in conjunction with December Energy Awareness Week in Oregon and Iowa, proclaimed by the governors at the associations' urging. PSEA has urged a similar week during which local teacher associations would serve as energy information sources for their communities. NEA has published an energy crisis bibliography, and both NEA and the New York State United Teachers are setting up task forces to develop teaching materials. The New Jersey Education Association is compiling a 12-page insert for its February magazine, including a roundup of problems and teaching suggestions.

Most extensive materials to date probably have been developed by the Iowa State Education Association and the state's higher education association and public instruction department. They include a question-and-answer book on the energy crisis, featuring comments by Gov. Robert Ray's energy advisors, a bibliography, and suggested elementary-secondary level activities. ISEA also produced or made available: casette tapes of a program for Public Service Radio featuring the governor and his energy advisors being questioned by a panel including the association president; an eight-minute tape of Iowa's Sen. Richard Clark on the origin of the problem and congressional action; regional briefings for teachers and college faculty; and special showings, for teachers, of an educational TV program.

12/19/73

EFFECT ON TEACHER ASSOCIATIONS

The energy crisis is also changing the way of life of teacher representatives as education associations--amid cheerful staff jokes--implement fuel conservation measures. Questions a traveling fieldman: "If we put the thermostat at 50, can we drive at 68 mph?" And a Midwestern distaff member chuckles that females "might get grabbed in halls where lighting has been reduced, but at least that would be one way to keep warm!"

In addition to the usual building measures advocated, associations are also cutting down or consolidating evening and weekend meetings, using more telephone conference calls in lieu of meetings, coordinating travel assignments and forming car pools to meetings and urging teachers to do the same, and considering cancellation of some teacher association vacation trips which might be affected by school calendar changes. While Iowa staff have been alerted that they may go to a four-day week if the situation gets more serious, most other locations said that the gasoline shortage, increased gas prices, and reduced service station hours will be responsible for the greatest change in operations, with car travel cut and employees already considering negotiating an escalator clause on gas expenses. As one North Carolina staffer laments, "A trip which normally took me less than 2½ hours took 3 hours and 15 minutes at 50 mph, and then when I arrived in town at 7 p.m., I had to drive around for 30 minutes to find an open gas station or otherwise remain overnight."

FEARS BEYOND THE ENERGY SHORTAGE

Even beyond the energy shortage, education leaders are plainly worried about what the related skyrocketing prices and the economic situation might portend for already financially hard-pressed schools. Thomas Hobart, president of the New York State United Teachers, states that the organization may have

to seek special legislation "if the fuel emergency creates a critical erosion of school revenues due to rising fuel prices and other costly energy-saving steps."

Forrest Rozzell, executive secretary of the Arkansas Education Association, best sums up these fears: "While of course we would be concerned if schools must cut back a few days or weeks, I'm afraid that may turn out to be really insignificant compared to the economic problems which may result from the energy problem. It has taken a long time for schools to get some increased funding--due mainly to general financial well-being. Schools may well be among the first to suffer in an economic slowdown."

And educators wonder: After the nation has already frittered away its valuable finite energy resources without regard for the next generation or the future of the country, will we now also shortchange our children's education?

# # # #

12/19/73

Senator PELL. Mr. Salmon.

Mr. SALMON. I am Paul B. Salmon, executive secretary, American Association of School Administrators.

I appreciate the opportunity of appearing before the committee to present to it the position of the American Association of School Administrators.

We are an association with a membership of 20,000 practicing school executives across the country.

My written statement will expand on the things I will say here.

Basically, we believe the schools of America must be given priority treatment in the allocation of critically short resources so as to operate these institutions.

The schools need gasoline, heating oil, natural gas, and electricity. We would point out to the committee that it is the Nation's schools with elementary, secondary and higher education levels which house nearly one-fourth of the total population of the United States on any day, on any school day, in our Nation.

Schools are a basic institution to our society and must, we feel, be accorded priority treatment. It is through our system of mass education in the United States that we have achieved our preeminent role in the world community.

Next, we would point out that school administrators are already in the vanguard of those who have instituted practical energy saving measures for maintaining their responsibility to youth and to our country.

I know of no other institution in our society that has responded more quickly or diligently to the energy crisis than the schools of America.

In the last few weeks alone, literally pounds of mail have come across my desk indicating the unique and creative solutions school administrators have devised in order to cut energy consumption to an absolute minimum.

I can assure you, Mr. Chairman and members of the committee, that school administrators will continue to strive to meet both the letter and the spirit of the guidelines. It is clear to the American Association of School Administrators, however, that this is a time in our history when our access to certain natural resources is on the decline. We must continue and even accelerate the development of our human resources now.

The youth of our Nation is an incalculable valuable asset. Only through the development of this brain power will we be able to solve this problem on the long run.

We would also be remiss if we did not point out to the committee another effect of the energy crisis on our educational institutions. That is the spiraling costs of doing business.

The increased cost of gasoline, heating oil, natural gas and electricity is throwing school budgets into disarray. We believe that the Government needs to recognize this and to provide assistance to us.

We believe, too, that the schools must continue to operate as nearly normal as possible to benefit youth and all Americans. We reject the solutions by some that would shorten the school day or school year without considering tradeoffs.

We recognize, as you must, that such solutions are not solutions at all, and sometimes cause greater problems than they solve.

It is already recognized that a child's loss of learning during the summer vacation is substantial, and to impose an unplanned and hasty break in the midyear is unthinkable.

Not only would it damage the child's educational opportunity, but would cause personnel problems in the school district, many of which have legally binding contracts establishing both length of day and school year as far as their employer is concerned.

In conclusion, it is the opinion of the American Association of School Administrators that our schools must be given every opportunity and assistance to meet their responsibilities to the American public and to the youth of our Nation.

Certainly, we cannot, nor do we believe that any member of the committee can think of a more important institution in our society than the schools.

To summarize, we believe that schools should have the highest priority. We believe that the schools should be guaranteed their allocation within their priority. We believe that there should be local determination of appropriate ways to live within the guidelines established and that consultation should be established now and should be continuing between the Energy Office and the education leaders of the Nation represented by AASA, NEA, and the others that are here.

Senator PELL. Thank you very much indeed, Mr. Salmon.

[The prepared statement of Mr. Salmon follows:]

AASA

American Association of School Administrators

Statement on Behalf

of the

AMERICAN ASSOCIATION OF SCHOOL ADMINISTRATORS

Submitted by

Paul B. Salmon, Executive Secretary

Concerning the

Nation's Energy Crisis

and its

Effect on the Elementary and Secondary Schools

Before the

Subcommittee on Education

Committee on Labor and Public Welfare

United States Senate

Monday, January 7, 1974

1801 N. Moore Street, Arlington, Virginia 22209 703/528-0700

Mr. Chairman, members of the Committee:

During the last few weeks literally pounds of mail have crossed my desk regarding the problems America's school administrators are facing in attempting to keep the schoolhouse warm and operating and the buses on the road.

Unfortunately, there is no easy solution to the energy crisis, nor will it go away when spring arrives. It will be with us next summer and when cold weather returns next fall.

It is heartening to me, however, to see the very conscientious way school administrators are responding to the immediate crisis and the varied steps being taken to squeeze every bit of energy out of the available resources. Practically every conceivable step is being taken -- thermostats are being lowered by at least six degrees; school bus routes are being totally eliminated, shortened or rerouted; lights are being turned off in all but the very necessary areas; field trips are being eliminated; heating plants are being inspected to assure maximum output; holiday vacations were lengthened; daily schedules are being adjusted to operate at the peak warm period of the day, extra-curricular activities are being reduced in number or totally eliminated, and many, many other steps are being taken.

In short, Mr. Chairman and members of the Committee, the school administrators of America are doing a magnificent job of meeting their commitment to the rest of the nation to conserve our precious energy while maintaining their essential function -- the education of our youth.

Regrettably, there are too many individuals in our land coming up with pat answers on how schools can save fuel and gasoline without the remotest consideration of the very unique problems such solutions cause.

For instance, a number of state officials immediately jumped to the conclusion that the best way to save fuel was to close for a month in mid-winter. That would save fuel.

On reflection, however, the more enlightened rejected this top-of-the-head answer because of the myriad other problems, some even more severe, this would cause. Still the idea seems to be alive in some places.

It is already well established that a child's loss of learning during the summer vacation period is significant. To add another break of any magnitude in mid-year seems to AASA to be unthinkable. It not only injures the pupil's learning rate, but seems to place schools and education in a role secondary to other institutions in our society.

Still another popular solution is to cut back the school week to four days from the present five. Again, we believe this is a simplistic solution to a complex problem. It is totally impossible for anyone engaged in a creative field such as education to accomplish in four days, even with additional hours in those days, what has originally and traditionally been scheduled for five. You simply cannot expect pupils to perform up to expectations in a shortened work week. Nor will they.

Another problem accompanying a shortened work week or year is the effect on school personnel, many of whose organizations have concluded legally-binding contracts with boards of education concerning working hours and conditions. Many school systems would be thrown into turmoil by such proposed actions.

AASA is heartened to see, however, that the U.S. Office of Education has appointed a coordinator for energy within the last few weeks. We were astounded to learn previously that no one in the entire Executive Branch had been given the assignment to assess the energy needs of the schools and work with administrators in

meeting their responsibilities to America's youth. We felt so strongly on this point that we sent a letter to the President pointing out what we felt was a major oversight.

AASA believes quite strongly that schools must receive priority treatment in the allocation of those critically short fuels so necessary to run schools. These are: gasoline, heating oil, natural gas and electricity.

We would point out that it is the nation's schools -- at both the elementary-secondary levels and higher education level -- which house nearly one-fourth of the population of our great nation five days a week. Schools are the basic institution in our society and must, we feel, be accorded such priority treatment.

It is through our system of mass education that the United States has achieved its preeminent role in the world community.

It is clear to the American Association of School Administrators, that at this time in our history when our access to certain natural resources is on the decline, we must continue -- and even accelerate -- the development of our human resources -- the youth of our nation. Only through this procedure will we have the brainpower and the capability in the future to overcome such natural and man-made crisis.

Still another major concern of school administrators is the spiraling costs associated with the current shortage. We believe this Committee must understand -- and certainly the American people -- that such increased costs in the price of fuels and attendant services to the nation's schools as a result of the energy crisis will have a major and dramatic impact upon education budgets. As you know, most school budgets are already stretched to the point of breaking, and these additional costs could very well spell financial disaster for some school systems in our nation.

Quite obviously, this financial situation will mandate school administrators to attempt to gain additional revenues at the local, state and national levels in order to meet their educational responsibilities to youth and contract responsibilities to staff.

In short, Mr. Chairman and members of the Committee, the American Association of School Administrators believes that schools are doing an outstanding job in meeting their responsibility to save energy, but they should also receive priority treatment in the allocation of energy so they can also meet their responsibility to America's greatest resource -- its young citizens. It is these individuals we must prepare today to face the many and varied challenges of the future. Schools must have the resources to do this.

In closing, I'd like to offer the assistance of our Association to the Chairman and the members of this Committee as you undertake the awesome task of solving one of America's greatest and long-lasting problems.

Senator PELL. Mr. Benton.

Mr. BENTON. Chairman Pell, members of the subcommittee, ladies and gentlemen, I will try not to touch specifically on the points already made.

I agree with most of the points that have been presented by this group, by our colleagues here at the table.

I want to take a point of personal privilege here to thank Senator Hughes in presenting me to this committee, and I am happy to have the opportunity of representing the Council of Chief State School Officers at this particular time.

I plan to make three brief points as it relates to this energy circumstance.

You have a copy of my printed statement, which is rather lengthy, and I will try to summarize that as closely as I can.

In trying to deal with the energy crisis, a fault comes to my mind, a quotation that I have used many times in my job as State superintendent. This is a quotation from Thurber:

"Let us not look back in anger or ahead in fear, but around us in awareness."

We have found as we tried to deal with the energy crisis in Iowa that one of our biggest problems has been creating an awareness among people, and certainly this has been one of the things that we have tried to do.

Now, for the three points I would like to make and discuss very briefly with you.

First of all, I would like to emphasize what has already been said here, that certainly the schools have assumed a preeminent role in trying to get on top of the energy crisis in helping the citizenry—not only the students, but the total citizenry—to determine what are the impacts or what are the implications of the energy crisis and how to deal with it.

The second point I would like to make is—I think probably reiterating a bit here—that closing schools will not conserve a significant amount of energy.

I have some statistics, at least from Iowa, that I think will make the point very clear.

Certainly, the third point I would like to discuss very briefly is this business on some of the other concerns, that if you close the schools, what happens, not only in education, but what happens in terms of other types of energy uses?

So I will try to summarize very briefly.

Before going into that, I would like to point out one or two very brief things that we would like to do in Iowa to illustrate this point, that the schools have assumed a preeminent role in trying to meet the crisis. We have been working very closely with the Governor and other entities in the State of Iowa to get on top of this.

We have called meetings and had consultations, as Dr. Wise mentioned here. We have had consultations with educationally related groups. All the planning we have done on a State level has been done in that context.

We have had a series of actions.

Our schools have lowered the thermostats and have implemented a number of conservation measures.

We had an energy awareness week during the week of December 10 to 15. Our Governor proclaimed that week, and we, in conjunction with the Iowa State Education Association and other groups, prepared a number of materials that are used in schools.

Our education television broadcasting network entered into this. Our Athletic Association curtailed all activities during the holiday season and just resumed this week.

The question that was raised here this morning—and I, at least, have a partial answer from the State of Iowa—are these conservation measures working? At least, in the city of Des Moines, during the early weeks of December, we had this example to prove it.

As the temperatures were being lowered approximately 5 degrees, our gas suppliers in the city of Des Moines found they did not have to interrupt the use of natural gas in the schools, hospitals, and other major users that are on interruptible basis.

This has never happened before. Generally, when they normally reached about 10 or 15 degrees, they would have to interrupt a number of their users. This did not happen at that particular time.

So we, at least, think that this is some indication that our labors have borne some fruit in the State of Iowa.

Now, when it comes to the significance of the energy saving in closing the schools, our State geologists have come up with statistics that we found extremely revealing.

For example, in the State of Iowa, they have determined that we use approximately 850.3 trillion Btu's of energy in the State. When you get into percentages, this is rather significant.

For example, in the State of Iowa, residential and commercial users account for 23.9 percent of the total energy used. The industrial users account for 16.8 percent.

Our transportation system, exclusive of school transportation, uses 26.6 percent.

The generation of electricity in the State of Iowa uses 22.9 percent.

Here is a significant statistic. The schools account for 1.2 percent of the total energy that is consumed in the State of Iowa. Hospitals account for .31; agriculture, 4.1, and miscellaneous, 4.2.

I bring these statistics to your attention to illustrate that you can close the schools a long period of time and you still do not have a significant saving of energy.

My staff worked it out this way. You would have to close the schools 22 days in Iowa to equal one day of closing down transportation, for example.

You would have to close schools 14 days to equal one day of closing down industry.

I bring these to your attention, not to advocate closing down either one of those industries, but I am trying to put it into a conceptual framework for you.

I think it is something you have to really take into consideration.

Again, I will not reiterate the other points I think that have already been made. I agree wholeheartedly that if you close the schools

down, you are creating a great many other social problems. I will let my printed statement stand on that.

I would like to close with this thought: In closing, and thanking you for the opportunity of making this presentation, let me leave you with one thought in regard to the difficult decisions you must reach.

In principle, I hope you will determine that the best places to save fuel are those where the effects will be the least permanent. If we are deprived of some warmth in our homes this winter, if we are not able to drive our cars at our individual determination, if we are not able to consume all the entertainment and luxuries to which we have become accustomed, the effects of these changes in our lifestyle are not long lasting.

But if the education of the youth and adults of this Nation is interrupted or curtailed, the effects of this loss are cumulative. It will not be cured or replaced with the advent of warm weather or the discovery of new energy sources.

Thank you again.

[The prepared statement of Mr. Benton and other material supplied for the record follows:]

Statement of

Dr. Robert D. Benton, State Superintendent
Iowa Department of Public Instruction

on behalf of the

Council of Chief State School Officers

Before The

Education Subcommittee of
the Labor and Public Welfare Committee
U.S. Senate

January 7, 1974

Regarding the establishment of priorities
for mandatory fuel allocation

STATE OF IOWA • DEPARTMENT OF PUBLIC INSTRUCTION
GRIMES STATE OFFICE BUILDING • DES MOINES, IOWA 50319

Iowa
a place to grow

ROBERT D. BENTON, Ed.D., STATE SUPERINTENDENT
David H. Bechtel, M. A., Administrative Assistant
RICHARD N. SMITH, Ph.D., DEPUTY SUPERINTENDENT

Chairman Pell, Senator Hughes, members of this Subcommittee, ladies and gentlemen.

My name is Robert D. Benton and I am the State Superintendent for the Iowa Department of Public Instruction. I am here today on behalf of the Council of Chief State School Officers representing the 56 state and territorial superintendents and commissioners of education of this nation.

I wish to thank the committee for the opportunity to testify regarding establishing priorities for mandatory fuel allocation and consideration of other facets of the present energy crisis. Also, I would like to express my appreciation to my fellow Iowan, Senator Harold Hughes, for taking time from his busy schedule to extend to me the extreme courtesy of introducing me to the members of this Subcommittee.

My presentation has a two-fold purpose, one far stronger than the other. The first is to point out what I feel to be the fallacy that significant energy conservation can be gained by the closing of schools. My second and far more important purpose is to indicate why schools should be given high priority in any program of fuel allocation, assuming that all sectors of our society are faced with a reduction in energy consumption.

Before launching into my discussion of those two main points, which I readily admit are open to debate, I would like to make several positive statements regarding this situation.

The schools of this country have been among the first to recognize that an energy crisis was on the horizon, and they have reacted decisively and positively. This recognition came when many school districts failed to receive bids last spring for the 1973-74 school year supply of fuel oil and gasoline. And, those who did receive bids, found healthy increases in prices and shorter periods of time for which the prices would be held firm to be the mode. It is true that some interpreted these situations as attempts on the part of petroleum distributors to "gouge" the school districts, but the more thoughtful recognized this as the first signs of startling changes in the energy situation.

The decisive and positive actions have been manifested in many ways. Let me use my own state--Iowa--to illustrate this. In their October meeting, the members of the State Board of Public Instruction and I, their executive officer, made preliminary plans for statewide action in this matter. A call was issued to representatives of various education-related groups in the state to meet in Des Moines on November 7 to map strategy and to develop plans for action. Coincidentally, this was the same date that President Nixon made his first of several addresses to the nation on the energy crisis. I'll not dwell at any length on the details of that meeting, but I do want to identify two broad generalizations that emerged from our deliberations and briefly list a rather rapid sequence of actions and events that have taken place since then.

What were the generalizations? First, a low level of awareness and genuine understanding of the energy crisis was apparent among all segments of society. And, second, once a degree of awareness was established, the necessity of implementing significant energy conservation measures became self-evident. All of our actions in Iowa have been outgrowths of those two rather simple but compelling concepts. The following list is a brief compendium of decisive and positive actions on the part of Iowa schools:

1. Public and private schools, within their technical capabilities, have heeded our request to maintain much lower temperatures in their buildings. These suggested temperatures have ranged from 50 degrees in storage areas and corridors to 68 degrees in classrooms during the day and somewhat lower at night and on weekends.

2. An "Energy Awareness Week" was proclaimed by our Governor, and this was observed in all of our 451 local school districts the week of December 10 through the 15th. Our more than 700,000 public and private elementary and secondary school students were turned loose on the populace of the state. If there was any Iowan not aware of the energy crisis after that onslaught, it was not the fault of the school children.

3. The fifteen community colleges in the state have launched intensive "awareness" programs through their adult and continuing education divisions to supplement the "Energy Awareness Week" activities.

4. The Iowa Educational Broadcasting Network, the state's educational television agency, produced and broadcast several significant programs to the schools and the general public.

27-765 O - 74 - 9

5. The athletic and other extra-curricular activities associations voluntarily cancelled all athletic contests and public performances and banned all practices and rehearsals during the holiday season; thus schools were able to keep thermostats at 50 degrees for an extended period of time.

Have these efforts to create an awareness and understanding of the energy crisis been productive? What about the energy conservation measures? Have they produced significant reductions in use of scarce energy resources? It would be difficult to produce iron-clad scientific evidence, but one little-known event recently occurred in Des Moines that leads us to believe that our labors are beginning to bear fruit. One night in early December, the temperature started to inch downward and finally reached 5 degrees above zero. This isn't significant in and of itself, but what is significant is that the city's supplier of natural gas did not have to interrupt service to any of its large consumers that night. This had never happened before in the history of the company. In fact, traditionally, the company had had to ask schools, hospitals, factories and large retail establishments to switch over to alternate energy sources when the temperatures reached the 15 degree level. Yet, on this night, when the temperature was ten degrees colder, the company kept all users "on-the-line." I am told that this phenomenum has continued through the month of December. We're inclined to think the lowered thermostats in the homes, the industries, and the commercial and governmental establishments in Des Moines are making this possible.

Up to this point, I have limited my remarks to general responses that schools in my home state have made to the energy crisis. I am sure that a similar story could be related for each of the states. Let me now briefly outline the current energy situation in the schools of the nation as a whole as reported to me by officials from several state departments of education.

They report that schools are facing and coping with the immediate problems in regard to the "energy crunch". However, they have expressed more serious concerns regarding the long-range implications of fuel shortages. To date there are only isolated situations of districts facing the immediate problems of obtaining heating fuel or gasoline to keep in operation.

In Iowa no district to date has had to shut down due to a lack of fuel. In Idaho the same situation is reported with no shut downs or four-day weeks anticipated this year. In the past two weeks in that state, however, emergency action has been needed to obtain fuel for 14 of the state's 115 school districts. Idaho reports a major problem from the reluctance of distributors to move fuel or gas because of a lack of understanding of government regulations.

Rhode Island indicates that its problems in regard to obtaining gasoline for transportation have "been solved" by getting school buses identified as part of the public transportation system. Maine indicates similar problems concerning gasoline but closed all schools in the state from December 22 through January 6 which has temporarily delayed this issue. Maine also indicates that favorable

weather situations have been of marked assistance in regard to fuel oil supplies for schools. All states report problems with districts that made conversions from coal to oil within the past year and as such cannot establish a six month allotment figure. Michigan indicates that all its schools have been able to maintain operation to date but project significant shortages in both gasoline and fuel oil, from estimated needs vs. contract commitments, for the completion of the current school year.

A problem that has been indicated by all states is cost increase that will go significantly beyond levels budgeted for the current year. Increases of 100 percent in fuel oil and 75 percent in gasoline are very common. In states that have statutes controlling the budgets of local school districts there are very serious implications in this cost spiral that may require legislative action in individual states for schools to legally stay in operation.

These are only examples of situations in some states, but I would judge them to be representative of immediate concerns. On a longer range basis, specifically for the latter part of February and March, all states with which I have had contact indicate concern for maintaining the operation of their schools. Of major issue is the inability to obtain factual data and information from energy suppliers. Concern is expressed as to the validity of information provided by the salesmen of energy resources. I feel the general situation can be expressed by a comment from Rhode Island which indicated that planning for February and March was "like looking into a long black hole."

I'm afraid my "several positive statements" have gotten a bit longer and more involved than I intended. My purpose has been to develop a conceptual framework for my subsequent discussion and to make a very specific point concerning the energy crisis and its relationship to the schools. My point is this: The schools of this nation can be counted upon to assume their rightful share of responsibility in meeting this crisis. In fact, I personally think that society has a right to expect that the educational sector will assume more than its share of responsibility and will exert an unusual amount of leadership in helping all segments of society to respond to this national concern. I would submit that the latter has already occurred and will continue to be self-evident. I would further submit that the educational sector has been pre-eminent in the conservation of scarce energy resources. Therefore, I feel rather strongly that all other segments of our society should be expected to do no less.

Now, to return to my two main points. There appears to be an assumption on the part of some people that significant savings in energy consumption can be gained by closing schools or by shortening the length of the school day. I feel this position is open to challenge. In providing such a challenge, I would

again use the situation in Iowa as an example. In looking at total energy consumption in my home state, schools account for only 1.2 percent of this total. This 1.2 percent includes both the consumption for heating of facilities as well as the curricular and extra-curricular transportation of students. In comparison the industrial sector accounts for 10.8 percent and the transportation sector 26.6 percent of total consumption.

It would not be accurate to make an analysis of consumption on the basis of percentages but comparisons can be drawn from looking at the situation from total BTU's consumed. When such comparisons are made, it is of interest to note that we would have to close our schools for approximately 22 days to make the gains that could be accomplished by shutting down transportation for one day; we would have to close our schools for approximately 14 days to make the gains that could be accomplished by closing industry for one day. I don't make these comparisons to advocate that either industry or transportation be "shut down." I make them only to get in perspective the "proposed gains" that could be accomplished by "shutting down" schools. I am sure that the situation in Iowa in regard to energy consumption by schools would not be materially different than that found in other states.

The effects of closing schools and turning this population back on other sources of energy consumption in a community would have questionable value in total energy conservation. I have had communication with various other state superintendents in regard to closing schools, going to a four-day week and lengthening the school day, or reducing the hours of school attendance. In all cases these alternatives are being considered only as a method of meeting the immediate problem of a school or schools in regard to the current availability of fuel. There is not one state that has reported to me that indicates such an activity will have any positive effect on the total fuel consumption or conservation in that state. In fact, most feel the opposite will be true.

We currently have 92 percent of the nation's youth between the ages of 5 and 18 years of age in our elementary-secondary schools. If these students are not in school it cannot be assumed that they are not going to be fuel and energy consumers in other settings. High school students are going to be driving cars, working or looking for work, and seeking recreation or entertainment in the community. If you send pupils home and the parents are working they are going to turn up the thermostat that could be turned down for the day; they are going to be watching TV and playing the stereo; they are going to be consuming energy that would not be consumed if they were in school.

In terms of elementary students, with approximately 40 percent of this nation's married women working, it is obvious that many of these students are going to be transported to other places for adult supervision or this supervision will be transported to their home. In either case this action will consume gasoline. For those that are home with their mothers they,

like their older brothers and sisters, are not going to be there in isolation; they are going to increase the energy consumption of that home. When you take this aggregate of youth in terms of the energy demands they can generate, it is my opinion there is greater total conservation to having them in school rather than in other places in the community.

The basic position I want to take is in regard to the need for schools to have a high priority in any energy allocation plan adopted by Congress. In making this plea I am assuming that all sectors of our society are going to need to make reductions in their current levels of energy consumption if this nation is to meet its present and long-range energy crisis. Within this total sharing of responsibility, however, I feel there are sound reasons that the schools of this nation should be able to continue in operation.

In my considered judgement, the various proposals of the administration concerning mandatory fuel allocations have not given due priority to this continued operation of the schools. The published regulations that were due to go into effect December 27, and which have since been withdrawn, were noticeably lacking in mandating an appropriate priority for schools. And, even though I had not yet received a copy of the January 2 Federal Register before preparing this formal statement, I have been told that the new regulations published on that date were similarly void of proper recognition of the schools in the priority ranking for allocation of fuels.

In facing any situation of crisis this nation has consistently looked to its educational system for assistance, and this system has always responded. As I have already indicated, I have no reason to believe that the schools of this nation are not again responding in our current crisis and long-range concern in regard to energy consumption and conservation. It would appear to me to be a major departure from our long-standing position of public policy concerning the importance of education if we turn away from this education system in our present crisis and advocate the closing of schools. The answers to the problems of the future will come from this generation of students. If we close our schools and permit places such as shopping centers and entertainment to remain open on Sundays when it is not absolutely necessary, we will be indicating to these students that education is of relatively little value when compared with business and gross national products. This is a confusion of value priorities I do not feel will insure the continued progress of this nation; and "education" we cannot afford for this generation of students.

There is also little doubt that many of our adult population are going to be faced with unemployment and required employment shifts due to the current energy problems. These people, in many cases, are going to need new employment skills. Our education system, through adult continuing and vocational program offerings, has provided such needed retraining opportunities to

adults. Last year in Iowa, for example, we had 240,000 adults, out of a total state population of less than 2 million people, in such programs. These were not the "recreational" adult activities but programs providing specific competencies and vocational skills. The delivery system for such needed retraining opportunities is not going to be available to adults faced with job displacement due to the energy crisis and those that have normally enrolled in these programs if we close or unduly interrupt our public education system.

Schools serve many other community functions in addition to their educational responsibilities. They provide recreational and avocational activities, they provide meeting space for many community programs and they provide entertainment for both youth and adults. The school is the one institution around which the total community rallies. (For those of you who have ever been involved with local school district consolidation or reorganization, you are well aware of this strong school-community identity.) The point I wish to make is that a school does generate high community identity and to close it has significant effect on community morale. At this time in facing the energy crisis of this nation our people do not need an additional loss of morale. I feel that to keep the schools open and in fact increase their community services at this point in our history has great desirability. Let the schools "take up the slack" in regard to lost individual recreational activities for adults; let the schools offer the community entertainment that can be provided by extra curricular activities; and let the schools offer more service as a meeting place for other institutions of the community. It is far more efficient in terms of energy consumption to provide these programs and services in a single large unit such as a school than it is in many diverse smaller units. We did not close our schools during World War II when we were in short supply of resources, including fuel, for many of these same reasons. I feel this action has a parallel in meeting our problems of today.

The education community is in firm support of the need to establish priorities and to initiate conservation activities in regard to energy utilization. I know that the school systems in my state have already taken the lead in regard to reduction of energy consumption, and we are not atypical of the school systems of this nation. No one in education feels that special note is needed of these activities. This is not an activity to be rewarded, it is part of our responsibility; it is part of the educational activity for which we are in business. We cannot continue to exercise this leadership in our communities if priorities are established that force us to close our doors to the total public we serve.

In closing and thanking you for the opportunity of making this presentation let me leave you with one thought in regard to the difficult decisions you must reach: In principle I hope you will determine that the best places to save fuel are those where the effects will be the least permanent. If we are deprived of some warmth in our homes this winter, if we are not able to drive our cars at our individual determination, if we are not able to consume all the entertainment and luxuries to which we have become accustomed, the effects of these changes in our life style are not long-lasting. But if the education of the youth and adults of this nation is interrupted or curtailed, the effects of this loss are cumulative. It won't be cured or replaced with the advent of warm weather or the discovery of new energy sources.

THE IMPACT OF THE CURRENT ENERGY CRISIS ON OREGON SCHOOLS AND COMMUNITY COLLEGES

- Emergency Action Program in Oregon.
- The problems faced by Oregon schools and colleges due to the scarcity and increased prices of petroleum products.
- The response of Oregon schools to proposals to close schools or defer school days during the cold weather as an energy conservation measure.
- A brief summary of energy conservation efforts on the part of the Oregon educational community.
- Recommendations for Congressional consideration.

Dale Parnell
Superintendent of Public Instruction
Oregon State Department of Education

January 2, 1974

1/ Emergency Action Program in Oregon

To assist Oregon school districts and community colleges that face critical energy shortages, the State Department of Education is channeling all requests through our Office of Emergency Services and Defense Civil Preparedness. This office is funded for the current year with a federal grant from the Civil Defense Act of 1950. Our office coordinates closely with the Governor's Energy Office and the state Office of Emergency Services, which also is funded through the Civil Defense Act of 1950.

2/ Fuel Prices and Availability

Oregon Public Schools currently face problems of serious magnitude due to availability and increased prices of petroleum products. Information received from a random sampling of schools polled on December 26 and 27, 1973, indicates that the price paid by school districts for PS 300 heating oil has increased an average of 106 percent in recent months. Those districts which have received from their suppliers estimated price projections expect this increase to reach 200 percent and beyond.

Examples:

North Douglas School District is supplied with PS 300 by Union Oil Company on a bid contract which expires on December 31. Union Oil has informed the district that it cannot supply PS 300 beyond the contract termination. After requesting bids from twenty sources, and receiving none, this school district faces total heating oil outage. The District is hoping that contingency funds will meet the additional cost (if and when a supply is found) from January through June, and is tripling the amount budgeted for heating oil from $6,000 this year to $18,000 next year.

Lebanon School District is now paying $9.76 per barrel for PS 300, an increase of 77½ percent over the contract price of $5.50. The District will soon have to draw from emergency funds, and is at this time planning to triple the budget to $15 per barrel for next year.

A 77 percent increase in the cost of PS 300 has been experienced by the Seaside School District, along with a 19 percent gasoline price hike. Dollar savings realized by a 30 percent to 40 percent reduction in electricity use will in no way make up the increased costs of petroleum products.

The price paid by Oregon City School District for PS 300 has jumped from $4.60 per barrel to $11.79, an increase of 156 percent. Instead of the $20,000 budgeted for heating oil, Oregon City faces an estimated $55,000 bill, a difference that exceeds the district's emergency fund.

Funds earmarked for much-needed building maintenance will be diverted by Lincoln City School officials to fuel purchase, since emergency funds are inadequate to absorb the immediate 90 percent increase in the PS 300 price (from $5.16 per barrel to $9.80), and the 50 percent increase in gasoline price.

Coos Bay School District is struggling to cope with a 77 percent increase in the cost of PS 300, a 15 percent hike in PS 200 prices, and a 35.5 percent gasoline price jump.

For the Roseburg School District a 100 percent increase in fuel oil costs and a 16 percent natural gas price increase will result in a $19,616 budget deficit.

Myrtle Point School District contract (bid price of $5.90 per barrel) for PS 300 expires on December 31. The only supplier to submit a bid for the new calendar year has given a price of $10.23. This 73 percent jump, coupled with a 66 percent increase in lighter weight fuel oils (used to heat several of their buildings) and a 35 percent price raise in gasoline, leave the district, school officials feel, with few alternatives other than to dip into instructional program funds.

3/ School Closure Proposals

Proposals have been offered to close public schools during the colder part of the winter as an energy conservation measure. These proposals have been strongly resisted by this office and other school people in Oregon on the premise that students and school employees are energy consumers whether at school, home, or elsewhere. Although no figures are available to support the theory, it is estimated that energy consumption from the additional home heating, food preparation, television watching, driving, etc., that would result from school closure would at least equal the actual energy conserved by the schools. (Mass feeding in school cafeterias, for example, is almost certainly far more efficient than the many small unit food preparations that would otherwise occur.) At the same time, closing down the schools will certainly set back the educational program. Unemployment of classified personnel and conditions of teacher contracts also are a consideration in any closing proposal.

Teacher bargaining contracts, along with student summer employment in Oregon agriculture, also make difficult the consideration of suggestions to defer school days during colder winter weather to warmer days in June.

It is the position of this office that could school closures be shown to produce, in fact, a net energy savings, any closures should follow a priority pattern. State colleges and universities should be the first to close, followed in order by community colleges and high schools, with elementary school closure as a last resort.

4/ Energy Conservation Education in Oregon

Since the real "crunch" of the energy crisis has been upon us, the educational community of Oregon has initiated and carried out extensive conservation measures, both in terms of educating the public and in exemplary practices.

Examples:

- The week of December 2-7 was declared by Governor Tom McCall and Superintendent of Public Instruction Dale Parnell as "Energy Crisis Week." As part of this week, many schools in the state engaged in intensive conservation practices and publicity. Teaching projects at all grade levels were tied to energy conservation. Many of the innovations of that week are being continued.

- To assist educators during and after Energy Crisis Week, the State Department of Education published and distributed to all schools a handbook, "Energy Crisis: Teaching Resources," containing a broad background of energy information, teaching suggestions, and conservation check lists.

- The Governor's Office, Superintendent of Public Instruction, and the Oregon Museum of Science and Industry are sponsoring a statewide "Energy Proposium," an occasion to explore and share the best energy conservation efforts in the state.

- Sixty-four school districts in the Pacific Power and Light Service area achieved a 20 percent or greater KWH reduction during October 1973 over October 1972. Many achieved up to 40 percent and greater.

- Baker Public Schools scheduled a "Walking Wednesday" to encourage all students and employees to use school buses or walk to school.

- Many schools in Salem District 24-J participated in "Arctic Days," when building temperatures were substantially reduced and students wore heavier clothing.

- Lane Community College gained wide publicity for an Energy Crisis Day symposium.

- Schools and community colleges in Oregon are, virtually without exception, following the standard conservation suggestions such as:

  Lowering classroom temperatures to 68 degrees.
  Lowering illumination levels where safe and practical.
  Lowering water heater thermostats.
  Shortening showering time.
  Curtailing some school activities and related bus runs and field trips.

5/ Recommendations for Congressional Consideration

- Declare schools among the top priorities in the fuel allocation system.
- Place tough price controls on fuel oil and gasoline.
- Enact an "Emergency Fuel Oil and Gasoline Aid Act" to help schools and colleges financially meet the doubling and tripling of costs.
- Rather than cut back on Civil Defense program funding, the program should be supported, enlarged, and perhaps renamed the "Emergency Action Program." We need some group at the federal level, as well as in each state, that can move swiftly in times of emergency. Certainly the fuel and energy crisis is an emergency that requires speedy resolution.

Dale Parnell

Senator PELL. Thank you very much indeed, Mr. Benton.

The final member of the panel is Mr. Harold Webb, executive director, National School Boards Association.

I would like to take this opportunity to say how much this committee has enjoyed working with Mr. Steinhilber and Mr. Resnick.

Mr. WEBB. Thank you.

I am Harold Webb, executive director of the National School Boards Association.

Our association is the only major education organization representing school board members, who are, in some areas, called school trustees. Throughout the Nation, approximately 80,000 of these individuals are association members.

These people, in turn, are responsible for the education of more than 95 percent of all the Nation's public schoolchildren.

Currently marking its 35th year of service, NSBA is a federation of State school boards associations, with direct local school board affiliates, constituted to strengthen local lay control of education and to work for the improvement of education.

Most of these school board members, like yourselves, are elected public officials. Accordingly, they are politically accountable to their constituents for educational policy, fiscal management and educational productivity of the schools.

As lay unsalaried individuals, school board members are in a rather unique position of being able to judge legislative programs and administrative regulations purely from the standpoint of public education, without consideration to a professional or vested interested.

Mr. Chairman, I might say that I am going to enter a brief statement. I assume the full statement will be in the record.

Senator PELL. The full statement of all the witnesses will be included in the body of the record.

What we are interested in now is more or less the give and take here, and the reaction you have to the administration's points.

Mr. WEBB. Mr. Chairman much of what I am going to say is the result of information that we have gathered from the field.

I have with me a report that has just come from the press. If I may, I would like to offer that to you for the record as well.

Senator PELL. It will be accepted as a portion of your testimony.

Mr. WEBB. At the outset, we wish to commend you and the members of this subcommittee for holding these hearings on the effect of the energy crisis in the schools—particularly since you are already under the tremendous pressure of reporting out a comprehensive extension of the elementary and secondary programs.

Mr. Chairman, reduced fuel allocations and increased prices resulting from the current energy crisis will have adverse educational and financial effects on the Nation's public school systems.

In addition, the situation is forcing serious disruptions to the personal lives of parents and to the innumerable local businesses who are dependent upon the schools. Many of these adversities can be avoided, or at least eased, through congressional or administration action.

The thrust of my statement will be to explore those educational and financial hardships which are bound to develop under current circumstances.

First, the educational process.

Turning now to an examination of program cutbacks, we would expect that curriculum enrichment activities, such as library research, museum trips, direct exposure to the arts, and work/study projects will be among the first to fall victim to the energy crisis. The reason is that, as "outside" activities, these programs can be cut back with the least amount of administrative interference with basic plant operations or with basic student transportation systems.

In addition, in terms of saving, the elimination of these activities may conserve a substantial 5 to 15 percent of the total energy previously consumed for student transportation.

But the decision to curtail these programs should not be made as much on the basis of its being relatively easy to do so, but on the basis of their relative standing in the Nation's overall needs.

If the energy program permits a situation whereby schools are forced to continue their freeze on these "away" from school activities, the energy program is then, in effect, by affirmative action or omission, reversing the national priority already determined by the Congress under ESEA title III, career education, and other similar programs urging innovation and program expansion.

Because of the short supplies and sharp increases in the cost of fuel extracurricular programs, including sporting and social events, face immediate cutbacks as well.

However, unlike the academic oriented programs, such as the ones I described earlier, some of the activities are being continued with parents driving their children to the school theater or sports arena, for example, in their family cars.

The point is, for these activities, the gasoline expenditures which the school cannot afford, or is being precluded from making, can, where the community desire for the activity is high, be more than offset by personal gasoline consumption.

Until a policy is implemented to stop these activities, it would perhaps make more sense energy-wise for the schools to be able to have their gasoline needs fulfilled.

Up until now, we have been discussing programs which face curtailment because of the school's inability to transport students to them.

In addition to those programs, other activities may face curtailment because they are high users of electrical power or heating fuel. For example, vocational training for occupations requiring high-powered machinery and electronic equipment are particularly vulnerable.

Additionally, schools will probably be discouraged from purchasing and utilizing classroom equipment even though the Federal level has stated their priority need in such programs as NDEA III, education TV for disadvantaged youngsters, et cetera.

Similarly, in an effort to conserve heating fuels, adult education and other evening community service programs also face declension at a time when evening and after school use is being encouraged as efficient use of the taxpayer investment in public facilities. While some of these activities may be nonessential in the narrower sense of the public interest, others, such as adult education, can be tied to the immediate economic well-being of the individuals served.

Indeed, many workers may first find themselves without a job because of the energy crisis and then without a public institution to help qualify them for other employment.

Another approach being explored in several States is the reduction of the school week and/or the expansion of midsemester holidays. While the extension of regular sessions into the summer, lengthening the school day, or making more efficient use of learning/teaching time, can help mitigate the losses to the educational process which will result from lost classroom time, such losses will result nevertheless.

The reason is that extended time away from school tends to break the momentum which now only needs to be generated at the end of summer vacations. Similarly, the 3-day weekend, particularly for younger children who learn through reinforcement rather than homework, will give rise to the problem of maintaining continuity from week to week.

At the same time, we are skeptical that after a 3-day weekend, school children would have the capacity to sit through a longer and/or highly concentrated school day.

Particularly, if we look beyond the urgencies of this winter, the long-range effect could be significantly harmful, not only to the generation of school children affected, but to the future national well-being as well.

Accordingly, until more sophisticated approaches to offset the educational damage brought by shortened school schedules are developed, adequately tested, and disseminated, we strenuously urge the Federal level to use the powers at its command to prevent school districts from being forced into seriously disruptive scheduling alternatives and closings.

Shorter school weeks and extended winter vacations pose additional problems for children of low-income families. Frequently, such children receive the basic nutritional components of their diets through the school food program.

A serious energy shortage could pose a burden on the parents of the Nation's 46 million schoolchildren as well. For those low- or middle-income families wherein the sole parent works or where both parents work, a shift to a 4-day school week or prolonged winter vacations may cause economic hardship as parents are forced to quit jobs or pay for costly child care services.

In the case of the poor, the result may be a return to the indignity and reduced income of public welfare at a time when their energy related and food expenditures will be rising.

It should be noted that while the recent enactment of the Emergency Daylight Savings Time Conservation Act may conserve energy overall, it may not present a general savings to the schools.

Many parents whose children must walk long distances to school, use public transportation, or travel through unsafe areas do not want their children to attend school in the darkness. With many schools not being able to expand their transportation facilities, these parents are now facing the hardship and cost of taking their children to school themselves—frequently in the family car.

Many schools are under pressure to bypass the daylight savings legislation by starting classes 1 hour later. While this change in starting time would be both safer and more economical, it will be opposed by working parents who must pursue their normal activities on daylight time.

The operation of the public schools involves a cost of $52 billion per annum and employs 5 million people. Except for National Defense, no Government service, including Defense, is as intricately involved with the business of most local communities.

In this regard, independent school districts alone account for 47 percent and 26 percent, respectively, of total local and State expenditures. In all, the potential economic magnitude of nationwide school closing cannot be understated.

Senator PELL. Your whole statement will be put in the record in full. Are you reading your statement?

Mr. WEBB. I am reading some portions of it.

Skipping over some of the points I would have made, I realize the time pressure we are under, in conclusion we can say that the disruption which the energy crisis is expected to bring to the educational process, parents, and business will continue to grow.

Mr. Chairman, in many school districts, cutbacks will occur in the educational priority programs, including those developed by this subcommittee and subsequently supported by the administration and the Congress.

School boards are aware of their problems generally and are willing to do their fair share. However, given a deteriorating situation, we anticipate the need for greater Federal assistance in the nature of conservation information, priority fuel allocations, and financial aid to meet increased costs.

School boards, I might say in closing, stand ready, and our association stands ready to offer assistance to this committee and the Federal Energy Office in helping you with this serious problem.

Senator PELL. Thank you very much indeed.

[The prepared statement of Mr. Webb and the report referred to previously follows:]

NATIONAL SCHOOL BOARDS ASSOCIATION

800 State National Bank Plaza • Evanston, Ill 60201 • (312) 869-7730

Address reply to:
1120 Connecticut Ave., N.W.
Washington, D.C. 20036

Statement on behalf of
National School Boards Association

by

Dr. Harold V. Webb
Executive Director
National School Boards Association

on

The Energy Crisis in the Schools

before the

Subcommittee on Education
Committee on Labor and Public Welfare
United States Senate

Monday, January 7, 1974

Dr. Webb is accompanied by:

Dr. August W. Steinhilber
Assistant Executive Director,
Office of Federal Relations
National School Boards Association

Branch Offices: 1120 Connecticut Ave., NW, Washington, D.C. 20036 • (202) 833-1240
152 Cross Road, Waterford, Connecticut 06385 • (203) 442-0233

Mr. Chairman, my name is Harold V. Webb, and I am Executive Director of the National School Boards Association. I am accompanied by August W. Steinhilber, Assistant Executive Director of the Office of Federal Relations.

The National School Boards Association is the only major education organization representing school board members -- who are in some areas called school trustees. Throughout the nation, approximately 80,000 of these individuals are Association members. These people, in turn, are responsible for the education of more than ninety-five percent of all the nation's public school children.

Currently marking its thirty-fifth year of service, NSBA is a federation of state school boards associations, with direct local school board affiliates, constituted to strengthen local lay control of education and to work for the improvement of education. Most of these school board members, like yourselves, are elected public officials. Accordingly, they are politically accountable to their constituents for educational policy, fiscal management and educational productivity of the schools. As lay unsalaried individuals, school board members are in a rather unique position of being able to judge legislative programs and administrative regulations purely from the standpoint of public education, without consideration to a professional or vested interest.

Mr. Chairman, at the outset, we wish to commend you and the members of this Subcommittee for holding these hearings on the effect of the energy crisis in the schools -- particularly since you are already under the tremendous pressure of reporting out a comprehensive extension of the elementary and secondary programs.

Mr. Chairman, reduced fuel allocations and increased prices resulting from the current energy crisis will have adverse educational and financial effects

on the nation's public school systems. In addition, the situation is forcing serious disruptions to the personal lives of parents and to the innumerable local businesses who are dependent upon the schools. Many of these adversities can be avoided, or at least eased, through Congressional or Administration action. The thrust of my statement will be to explore those educational and financial hardships which are bound to develop under current circumstances. Mr. Steinhilber, in his statement, will demonstrate that, to date, those federal officers who are responsible for the energy program have not exercised the sensitivity which we believe must be accorded to these hardships.

Preliminarily, it should be noted that the energy crisis is not forcing all school districts to take the serious actions which I am about to describe. On the other hand, the situation should not be understated either. For example, at the end of November only 88 of 438 school districts in Minnesota could guarantee that they would even be able to stay open. Furthermore, the problem is not regional either. Indeed, since most modern Florida schools do not have windows, school districts in that state are concerned that they may not be able to stay open in warmer weather because of insufficient fuel for air conditioning. Perhaps a fair example of the impact which the energy crisis has already had on individual school districts can be gleaned from the digest of reports which is appended to my statement.

The Educational Process

Turning now to an examination of program cut backs, we would expect that curriculum enrichment activities such as library research, museum trips, direct exposure to the arts, and work/study projects will be among the first

to fall victim to the energy crisis. The reason is, that as "outside" activities these programs can be cut back with the least amount of administrative interference with basic plant operations or with basic student transportation systems. In addition, in terms of saving, the elimination of these activities may conserve a substantial 5 to 15% of the total energy previously consumed for student transportation. But the decision to curtail these programs should not be made as much on the basis of its being relatively easy to do so, but on the basis of their relative standing in the nation's overall needs. If the energy program permits a situation whereby schools are forced to continue their freeze on these "away" from school activities, the energy program is then, in effect, by affirmative action or omission, reversing the national priority already determined by the Congress under ESEA Title III, career education, and other similar programs urging innovation and program expansion.

Because of the short supplies and sharp increases in the cost of fuel extra-curricular programs, including sporting and social events, face immediate cut backs as well. However, unlike the academic oriented programs such as the ones I described earlier, some of the activities are being continued with parents driving their children to the school theater or sports arena, for example, in their family cars. The point is, for these activities, the gasoline expenditures which the school cannot afford, or is being precluded from making, can, where the community desire for the activity is high, be more than offset by personal gasoline consumption. Until a policy is implemented to stop these activities, it would perhaps make more sense energy-wise for the schools to be able to have their gasoline needs fulfilled.

Up until now we have been discussing programs which face curtailment because of the school's inability to transport students to them. In addition to those programs, other activities may face curtailment because they are high users of electrical power or heating fuel. For example, vocational training for occupations requiring high powered machinery and electronic equipment are particularly vulnerable. Additionally, schools will probably be discouraged from purchasing and utilizing classroom equipment even though the Federal level has stated their priority need in such programs as NDEA III, education T.V. for disadvantaged youngsters, etc.

Similarly, in an effort to conserve heating fuels, adult education and other evening community service programs also face declension at a time when evening and after school use is being encouraged as efficient use of the taxpayer investment in public facilities. While some of these activities may be non-essential in the narrower sense of the public interest, others, such as adult education, can be tied to the immediate economic well being of the individuals served. Indeed, many workers may first find themselves without a job because of the energy crisis and then without a public institution to help qualify them for other employment.

Another approach being explored in several states is the reduction of the school week and/or the expansion of mid-semester holidays. While the extension of regular sessions into the summer, lengthening the school day, or making more efficient use of learning/teaching time, can help mitigate the losses to the educational prosess which will result from lost classroom time, such losses will result neverthless. The reason is that extended time away from school tends to break the momentum which now only needs to be generated

at the end of summer vacations. Similarly, the three-day weekend, particularly for younger children who learn through reinforcement rather than homework, will give rise to the problem of maintaining continuity from week to week. At the same time, we are skeptical that after a three-day weekend, school children would have the capacity to sit through a longer and/or highly concentrated school day. Particularly if we look beyond the urgencies of this winter, the long-range effect could be significantly harmful not only to the generation of school children affected, but to the future national well-being as well. Accordingly, until more sophisticated approaches to offset the educational damage brought by shortened school schedules are developed, adequately tested, and disseminated, we strenuously urge the federal level to use the powers at its command to prevent school districts from being forced into seriously disruptive scheduling alternatives and closings.

Shorter school weeks and extended winter vacations pose additional problems for children of low income families. Frequently, such children receive the basic nutritional components of their diets through the school food programs. With an extra day per week of substandard nutrition, we would expect that the stamina of many such children would be weakened -- not to mention the state of their general health.

Burdens on Parents

A serious energy shortage could pose a burden on the parents of the nation's 46 million school children as well. For those low or middle income families wherein the sole parent works or where both parents work, a shift to a four day school week or prolonged winter vacations may cause economic hardship as parents

are forced to quit jobs or pay for costly child care services. In the case of the poor, the result may be a return to the indignity and reduced income of public welfare at a time when their energy related and food expenditures will be rising. Ironically, since the households of most working parents are empty during school hours, increased home energy expenditures resulting from a shorter school week or a longer winter vacation could offset energy savings in the school buildings.

Similarly, if the transportation needs of the schools can not be met -- or afforded -- parents would have to use automobiles to take their children to school. This would pose a tremendous burden on working parents in terms of time, gasoline costs, and gasoline rationing (if implemented). In terms of overall national policy, the irony of this result would again be that, even with the use of car pools, increased personal consumption could more than offset energy savings in the schools.

It should be noted that while the recent enactment of the Emergency Daylight Savings Time Conservation Act may conserve energy overall, it may not present a general savings to the schools. Many parents whose children must walk long distances to school, use public transportation, or travel through unsafe areas do not want their children to attend school in the darkness. With many schools not being able to expand their transportation facilities, these parents are now facing the hardship and cost of taking their children to school themselves -- frequently in the family car. Many schools are under pressure to by-pass the daylight savings legislation by starting classes one hour later. While this change in starting time would be both safer and more economical, it will be opposed by working parents who must pursue their normal activities on daylight time.

Economic Burdens

The operation of the public schools involves a cost of $52 billion per annum and employs five million people. Except for national defense, no government service, including defense, is as intricately involved with the business of most local communities. In this regard, independent school districts alone account for 47 percent and 26 percent, respectively, of total local and state expenditures. In all, the potential economic magnitude of nation-wide school closings can not be understated. Mr. Chairman, I would like to briefly explore with you three of the more general economic problems which are bound to arise. First, if the schools are forced to close-down, personnel whose services are not contracted for on a basis of work-days per year would face lay-offs, reduction of income, or other economic loss. Second, if the school year is extended into the summer, many nine-month teachers will risk losing anticipated summer employment. In passing we note that such a situation could lead to serious labor/management disputes in cases where contracts provide for a specific number of teaching days or a specific terminal date for the school year. Third, the schools are the major or even sole customers of many local businesses, particularly in the areas of transportation and food delivery services. These businesses and their employees would encounter serious difficulties if the schools are closed for prolonged periods or if the school week is shortened.

In highlighting the effects of the energy crisis on education, it should be underscored that our concern is not just that school districts will fall short in the competition for allocations. We are also concerned that, regardless of supply, the cost of fuel will also cause the non-fulfillment of vital educational

services. Many school districts are now beginning to find this to be the case as their annual bids for oil must be increased by two or three times over bulk discount rates which they received last year. Some are even finding that distributors won't accept contract bids since pricing is so uncertain. Apart from fuel prices themselves, the energy crisis can be expected to hurt school finance in general this year. Indeed, coupling increased fuel costs with an inflationary rate which was 8.4% in the year ending last November, expectations for higher rates of unemployment, and expectations for a general business recession, school districts will probably do worse than usual in having bond issues passed and budgets approved while their costs continue to skyrocket.

Of course the education community could afford the luxury of ignoring the energy crisis if all of its allocation needs were fulfilled at last year's prices. However, when consumers are being asked to endure the discomfort of a six degree reduction in home temperatures and possible gasoline rationing, the public school systems must do their fair share. And many school districts have done much before making the more drastic kinds of program decisions which I discussed earlier.

In this regard, the National School Boards Association conducted a survey which produced responses from 44 of our state associations, and a sampling of local school districts. This survey revealed that many districts during November and December had voluntarily taken the following measures: the lowering of temperatures, particularly in areas where students engage in physical activities; rescheduling athletic and other activities to the daylight hours; curtailing the use of buildings on the weekends and the evenings; eliminating night security

lighting; discouraging students from driving to school; urging teachers to form car pools; and the more efficient scheduling of vehicles.

As a further expression of voluntarisim, and willingness to cooperate with the federal program, our state school board associations and a significant number of local affiliates will be attending an NSBA energy conference in Washington, D.C., on January 17. At this conference, we hope the field will be able to develop a working understanding of the regulations, explain their problems to the Federal Energy Office officials, and discover longer term approaches to energy conservation such as architectural design, transportation routing, and building maintenance and utilization. In this regard, there may be a need for federal assistance for research, pilot projects, and the printing and dissemination of information.

In conclusion, we can say that the disruption which the energy crisis is expected to bring to the educational process, parents, and business community will continue to grow. Mr. Chairman, in many school districts, cut backs will occur in the educational priority programs, including those developed by this Subcommittee and subsequently supported by the Administration and the Congress. School boards are aware of their problems generally and are willing to do their fair share. However, given a deteriorating situation, we anticipate the need for greater federal assistance in the nature of conservation information, priority fuel allocations, and financial aid to meet increased costs. Mr. Chairman, I would like to thank you and the members of the Subcommittee for hearing the views of the National School Boards Association on the energy crisis in schools. At this point, with your permission, Mr. Steinhilber will comment on the application of the Federal Energy Regulations to the school situation.

Appendix I

REACTION OF SCHOOLS TO THE ENERGY SHORTAGE

A. COMMUNITY USE OF SCHOOLS

Holliston, Mass. (11/16/73) All Holliston schools, with the exception of the Andrews School, will be closed to all non-school activities beginning Monday (Framingham News). The lock up was voted by the School Committee on Thrusday in an effort to conserve fuel in the face of increasing fuel costs.

"We regret having to close the schools," Chairman Thomas Lyons said, after the lengthy debate ended, "however at this point our alternatives are limited. We must conserve heating oil for school hours. I sincerely hope that the residents who have been using school facilities will understand our position and cooperate." (The Andrews School remains open as the only building heated by natural gas.)

Montgomery County, Md. (11/21/73) Homer O. Elseroad, school superintendent, remarked that as far as closing evening activities, "We're going to do our part to conserve fuel, but I'm not in favor of severely cutting back after-school use of buildings if other fuel users continue to operate long hours at normal heat levels. This is one reason why some government allocation is needed in this crisis."

McIntosh County Public Schools, Georgia. (11/13/73) This district voted to curb "the use of McIntosh County Public School facilities to any group when electricity and heat are required." (The Board also cut field trips.) The Board cited the need "to insure that the schools will have enough fuel oil to heat buildings and enough gasoline to transport students during the remainder of the 1973-1974 school year, and thereafter, until the energy crisis is over."

Farmingdale, New York. (11/22/73) A "bare-bone energy conservation program" will curtail "all but the absolutely essential educational programs of the Farmingdale schools. Adult education, swimming, the Police Boys Club activities and all other undertakings utilizing the school buildings after regular hours will be cancelled at least until March. . . . All activities taking place in the schools on Saturdays and Sundays will also be cancelled. In effect, all Farmingdale schools will be closed and locked after the end of the regular school day." (Farmingdale Observer) Commenting upon this (11/29/73), school spokesman John Reagan said, "We realize any change would have a tremendous impact on many families, however, the schools are faced with a major curtailment of fuel supplies."

Manning, Iowa. (11/29/73) No adult education; no outside groups using the gymnasium. Allows other outside use "only at reduced temperatures."

Twists on Community Use

State Representative Bob Johnson, (R.-Sarasota, Fla.) has called for the Florida Legislature to authorize use of public school buses for mass transportation.

The Greater Bridgeport Transit District (Conn.) discussed the possibility of using school buses for mass transit, should a fuel shortage produce a large increase in bus ridership.

The Board of Jefferson Parish, La., (12/6/73) decided to permit all school employees, including teachers, to ride school buses as a means of conserving fuel.

"Conservation" Causing Community Use of Fuel

Fan buses are a case in point. Many districts have chosen to cut them. But as School Superintendent Thomas Pollino, of Mount Vernon, Washington, notes, "We are not asking the board to curtail any of the rooter buses. . . . To do so would only put more students in cars and increase fuel consumption as well as traffic hazards."

Acquiescence to Daylight Saving Time may well cause parents to drive students to school (see DST). Reducing bus routes, or lengthening the distance children must walk may have the same effect, notes Superintendent Dr. Kenny Guinn, of Las Vegas, "The local energy crisis could be worse if the district stopped providing transportation to schools because more parents would be out giving their children rides to and from class (12/1/73)." Ohio's chief of pupil transportation, Hanford L. Combs, made the same point (11/28/73), "What could save more fuel than keeping our children on school buses?"; he added that children are 50 times safer in buses than in private automobiles. Indeed, the editor of the Jonesville, Michigan, Independent (11/29/73), suggests that real conservation would occur if we were assured that school buses would have sufficient fuel, and then encourage "the public, both students and adults, to use the buses to get to the many functions where the schools are involved."

The most critical question revolves around cutbacks in school programs. For example, across the country, districts extended Christmas vacation by 2-3 days. (The rational, obviously, is that buses won't run and buildings won't be heated. Hence the schools would conserve.) One would like to know, how many homes were heated, how many TV's and stereo's used, how many meals cooked, how many lights burned, how many autos driven during the three days schools were closed.

B. COST

Already, rising costs of fuel for space-heating and buses has thrown many districts into confusion or consternation. Districts are spending far beyond their budgeted amounts for fuel, and are reluctant even to predict how much fuel will cost next year.

Holliston, Mass. "Heating fuel will cost the school system nearly $12,000 more than anticipated this year due to the shortage," the Framingham News reported (11/16/73). At that time, Union Oil had requested an increase from the then current $4.52 barrel for #5 oil to $7.40.

Penfield, N.Y. The Penfield Central School District paid $.1317 for a gallon of gasoline last year. This year (11/29/73) the price is $.2410 -- and this price (Chevron) was the only bid received. This means an $18,000 deficit. "On top of all that is the fact the vendors will only guarantee prices for thirty days," Business Manager James Sheehan reported to his board of education. "We'd better start taking a close look at where we can encourage a tighter budget," Peg Libby, a board member, responded.

Pawtucket, R.I. Cost of fuel for the school department has jumped 100% in a year, Edward Creamer, the business-finance administrator reported (12/7/73). Creamer's estimate is that fuel may cost as much as $250,000 this year, as opposed to $110,000 last year.

Washington County, Mississippi. County Superintendent of Education Jeff Bogue reported (12/11/73) that gasoline expenses have run "as high as 43.9 cents per gallon" this year compared to a range of 29.9 - 32.9 last year. The Leland Consolidated School District (in that county) paid $1300 for 3300 gallons this compared to $1170 for 3900 gallons last year.

Field School District, Ohio. Superintendent William T. Hall says the district ran 28 buses last year at a cost of approximately $10,000. He estimated that every 10 cent increase in gasoline costs the district $10,000. At current (12/11/73) prices, the cost will be $24,000.

Midland, Michigan. Cost of gasoline was to rise (12/11/73) from 13.88 cents last year to 22 cents this year. Last year the district used 150,000 gallons. This year it had anticipated using 162,000 gallons. Gulf only intends to supply 1500,000 gallons. (The Board has cut all field trips.)

St. Paul, Minnesota. Last year, oil cost 12 cents; this year the district budgeted 14 cents. Estimates (11/13/73) for actual costs this year range from 21 - 35 cents. The district average annual fuel oil usage is 2,156,920 gallons.

Rocky Ford, Colorado. (11/28/73) Gasoline is plentiful, but the price is 24.6 cents, just double last year according to Leroy Epps, head of transportation.

Shohomish, Washington. (11/22/73) Earlier in the month, oil rose $2.45 per barrel. This week it rose another $1.09 to a current rate of $8.91 per barrel. The Superintendent Gene Carson, told his board, "This, coupled with the increase in PS300 oil, will probably require us to seek an extension of the budget to cover these increased costs."

House, New Mexico. Last year the district bought a new butane heating system. This year it has returned to using coal because the price of butane has risen from 8 cents to 24 cents per gallon.

Jemez Mountain District, New Mexico. The state's largest user of LP gas bought 480,000 gallons last year. It will cost $50,000 to purchase it this year, twice the budgeted figure.

Lexington, Oregon. Superintendent Ron Daniels told the Morrow County School Board (11/24/73) that the price of gasoline has risen 21% since a bid was signed last spring. School buses traveled 326,438 miles last year and will do so again this year. At the current price, the district will be short $4000. Fuel oil is worse. The district uses 2500 barrels. Last spring it received a bid of $5.85, with increases to be passed along to the district. Mid-November came an $1.26 increase. That means an increase of $3150, if the price holds steady.

Springfield, Oregon. District Superintendent Bill Lewelllen has postponed the budget election for District 19 from March to May, "because of the nation's uncertain economy and the energy crisis."

Maintenance, Theft, and Vandalism are All Cost Factors

Bright lighting is often used for security purposes. If lighting must be curtailed, what effect? Within days of turning out night lights in Exeter, N.H., last November, the building was burglarized.

Clinton, Iowa, may be smarter. They refused to follow state guidelines and insisted upon maintaining outside security lighting.

Reports of gasoline thefts from bus gasoline tanks, in Muskegon, Michigan, prompted purchase and use of locking devices on bus tanks. (11/28/73)

Aiken, S.C., lost 800 gallons of fuel oil. (12/12/73)

Boston, Mass., lost 1500 gallons of heating oils from two schools. (12/12/73)

In Decatur, Alabama, the Limestone County Board of Education approved addition of locks on the gasoline pumps and hired a man to supervise the pumps at all times -- to protect against the possibility of employees filling their gas tanks at school district expense.

C. CURRICULUM ENRICHMENT PROGRAMS

Elimination of transportation during school hours is a commonplace conservation measure being taken in school systems -- as a result of cut backs from suppliers in gasoline or diesal fuel for buses.

Fairport, N.Y. has established "temporary suspension" of all school hour transportation as well as 4 and 6 o'clock activity bus runs and busing for special groups or clubs. According to the Fairport N.Y. Herald-Mail, "the cut backs were ordered "reluctantly" but the 149,000 gallons of gasoline allotted to the district will not last the year out if consumption continues at the present rate. Allotments are based on last year's usage when enrollments were lower and mileage totals were less. . . . Without restrictions, the district would face a shortage of some 29,000 gallons of gasoline.

Rosewell, Ga. has cancelled all field trips "because of the fuel shortage." If the energy situation becomes too critical, athletic games will also have to be cut (Dr. Ed Baker, Fulton County School Superintendent).

Huntington Beach, California, has cancelled "all field trips except those upon which a course of study depends," (L.A. Times).

Bay City, Michigan, has cut all transportation "except for transportation of sports teams."

Beaufort, S.C., has curbed "all extra-curricular activities in the future where transportation is required." According to Deputy Superintendent J. M. Randel, "Our first priority is picking up children and transporting them to school." And he added (Beaufort Gazette) that the fuel supply may be tight to accomplish this.

Running Springs, California, has cancelled all but two field trips (for which there were previous commitments). The district's fuel has been cut 15%.

Beaumont, Texas, South Park Independent School District -- "as a measure to combat fuel shortages" refused buses "to take students to the annual Beaumont Symphony Orchestra." Some disgruntled parents remarked upon there not being a cut back for football also.

Blanchester, Ohio. "Educational field trips which require the use of school buses are not being schedules until the termination of the crisis." Similarly, in the St. Joseph, Ohio schools, "All field trips are prohibited during the duration of the energy crisis." In Port Clinton, Ohio, fuel has been cut 7% by the distributor, and "all field trips will be eliminated." In Germantown, Ohio, "All educational field trips have been cancelled, and none will be scheduled during the energy crisis."

Abilene, Texas, School Superintendent A. E. Wells remarked November 28th that cuts had yet to be made -- and hopefully would not be made. He noted that "bus trips included busing of school children to Monday and Tuesday's symphony orchestra concert this week, to plays sponsored by ACT and the Junior League, and on frequent trips to the planetarium, among others. There are often field trips to the courthouse, the zoo, and other places in conjunction with class study," (in the summative words of the Evening Reporter-News). Said the Superintendent, "We think these trips are important to education. None of these are just pleasure trips. They are tied in with the curriculum."

Rochester, N.Y., (11/20/73), Paul L. Reason, Assistant Superintendent in charge of business affairs, said field trips using buses will continue "because they are an important part of the educational program."

A most eloquent editorial appeared in the Virginia Gazette published in Williamsburg, Va. (as follows)

TOURS IN TROUBLE

The energy shortage is beginning to affect everyone around Williamsburg, including children. One area where they're losing out is that of local field trips. The Williamsburg-James City County school system has has already eliminated the financing of field trips, although funds from activity budgets can be used.

Colonial Williamsburg told us there's some shrinkage in the number of school tours to the Historic Area, though not very much. So far, school trips from out of town haven't dropped off appreciably, probably because they were planned before the energy crisis.

At Jamestown Festival Park the story is the same -- for now. We were told local tours by school children are down somewhat, but the actual drop is not calculable. Local tour groups are admitted free, so there's no reflection in sales figures.

Here at the Gazette, plan tours have fallen off sharply from one or two a week to none in the last month.

All of this is minor now, but is portends a trend. It's possible that before long no local field trips will be scheduled. That would be pretty sad, being so near and yet so far away from this great 18th century living museum. Sure, youngsters could tour on their own, but there's something special about field trips with school chums and the corresponding impact these trips have on history appreciation.

One solution is for the parents to consider donating a few dollars to a field trip fund. School buses may be gas hogs, but we're told it doesn't take but a few dollars per field trip to run them around town. A fund of $100 or so could put a number of our children back in the streets of the Historic Area.

Critics might ask, why not tap the school system, instead? Because it isn't as much a matter of a few dollars as it is a matter of keeping fuel allocations of all kinds out of trouble. The first priority is to have enough gas to get kids to and from school.

A tax advisor has told us the money donated by parents would be tax deductible, provided it was given to the school system in the name of the tour fund. This solution is a short-term one. Eventually the school system will have to iron out its allocations to protect all segments of the school transportation program.

D. DAYLIGHT SAVINGS TIME

We (NSBA) telephone several school districts which, according to earlier news clippings, would seriously consider altering school schedules with the onset of DST.

We discovered (1/3/74) that urban districts, with many working mothers and relatively light busing, had chosen not to alter times. Districts that were more rural, with longer bus routes, did plan to change schedules.

Two problems are enunciated: safety of children who walk or must wait for school buses in the dark hours of the morning; use of energy in the early morning which will affect some school districts. (Note that depending on location within a time zone, dawn is at different times. In Louisville, for example, DST makes dawn at almost 9 a.m. in January.)

Newton-Conover, North Carolina: The Board agreed to start classes one hour later under DST "in view of the conditions which conceivably could endanger the lives of many pupils who would be waiting for buses or walking to school before daylight." (Hickory Record, 12/06/73) (Incidentally, we were told (01/03/73) that this district now requires outside groups who use school facilities to supply their own fuel oil.)

Ubly, Michigan: For reasons of the safety of children, according to Business Manager Mark Tenbush (01/03/73), the district will begin school one hour later under DST. His impression is, in terms of fuel consumption, the district "won't be saving a thing. We'll probably just break even."

Sarasota, Florida: School will begin one-half hour later, Superintendent Dr. Gene Pillot told us (01/03/74). This was a compromise due to conflict both with parent working schedules and with high school schedules. The reason cited was safety of children, because visibility is so poor in the dark of morning. In a (12/5/74 board meeting at which Daylight Savings Time was discussed, Pillot told his board that not adapting to DST might cost the district "25 percent more fuel in heating the schools for the early morning hours." To us he said, (01/03/74) that the half-hour compromise suggests the district will "probably end up consuming less energy," primarily because of less electrical use at the end of the day.

Haywood, North Carolina: Assistant Superintendent Lane Arrington told his board (12/02/73) that "the present schedule meets our needs more than any Daylight Savings Time. The proposed new time would cost the schools more in fuel, create grave danger to students on roadsides, and mean some would have to be out at 6 o'clock 'sun time.' In short, we would be swapping two hours of the coldest part of the day for two hours of the warmest part."

Nashville, Tennessee: Superintendent Dr. Elbert D. Brooks recommended (12/11/73) that the district adjust to DST by starting one hour later. The Nashville Banner stated editorially that Brooks was correct that (in the paper's words of 12/12/73) "DST would not save Metro schools any fuel, and, far more important, serious safety hazards to Metro students would be imposed by DST." Nevertheless, a 1/3/74 call to Nashville reveals that the superintendent's recommendations overruled by the community and then the school board.

Columbus, Ohio: In a 1/3/74 conversation, cited teacher contracts, working parents, and a number of the staff furthering their education after school hours as reasons for not adjusting to DST.

Knoxville, Tennessee: The News Sentinel (12/09/73) carried the following letter-to-the-editor which is notable both for its substance (that parents will drive children who have to walk in the dark, especially little children) and its fervor:

OPPOSING DST WOMAN SAYS CHILDREN
ARE MORE IMPORTANT THAN ENERGY

EDITOR, THE NEWS SENTINEL:

I am writing to join Leroy Maples in protest to the proposed Daylight Savings Time. I think the people should join together on this. My little boy is four years old and he goes to Headstart. I, for one, am not sending my child along the roads in the dark to go to school. Instead of helping the energy crisis, it's only going to worsen.

Most people won't let their children walk in the dark, therefore, they will take them to school in cars. And all Headstart children are only four and five years old. This is only going to encourage child molesters, because the children will be in the dark. I think it is a shame that the state is more concerned with the energy crisis than the lives of our children.

Mrs. Brenda Piper
and six other families

Callahan Road

National School Boards Association
RESEARCHREPORT

Report number 1973-1

Schools and the energy crisis

NATIONAL SCHOOL BOARDS ASSOCIATION

Mrs. Frederick A. Reimers, President
Harold V. Webb, Executive Director

James A. Mecklenburger, Director of Research

NSBA Research Report 1973-3
Schools and the Energy Crisis

Single Copy, $1.50. Discounts available for Quantity orders. Shipping and Handling charges will be added to billed orders.

No part of this Research Report may be reproduced in any form without written permission from the NSBA Research Department. Address communications to the Director of Research, National School Boards Association, 800 State National Bank Plaza, Evanston, Illinois 60201.

Information reported in NSBA Research Reports does not necessarily reflect official viewpoints of the Association.

Copyright © National School Boards Association
All rights reserved.

Report number 1973-3

Schools and the energy crisis

Recognizing the impending importance of the energy crisis for schools, the National School Boards Association in mid-November launched a clearinghouse of information about the effects of the energy crisis upon the schools.

A major activity has been to survey state school boards associations and a nationwide sample of NSBA Direct Affiliate school districts. State associations were asked these questions: Are schools currently affected by cutbacks of energy; if so, how? Will schools be affected this winter; if so, how? Are state or regional plans for conservation of energy by schools in the works? Who are the experts in your state who are monitoring the energy problem as it affects schools? Has your Association taken action, or does it plan to take action, with regard to the energy situation; if so, what? What actions do you recommend to local school districts? School districts were asked similar questions about the energy situation as it affects their district. In addition, a newspaper clipping service was retained to provide NSBA with reports of school district responses to the energy crisis across the nation.

This report summarizes information from 43 states and the District of Columbia and Puerto Rico; and 55 local school districts. Information in the report was provided by state school boards associations and NSBA Direct Affiliate districts unless otherwise indicated.

Schools and state agencies have been swift to respond to the energy crisis. Survey results prompt these observations:

1. Nationwide, at both the state and school district levels, schools have been cooperative with requests to constrain energy use, and willing to institute voluntary measures to conserve energy. Most frequently, schools have:

- lowered temperatures and turned off lights when rooms or sections of school buildings are not in use
- lowered temperatures and avoided unnecessary artificial lighting during the school day

- lowered temperatures more in large areas where students will be engaged in physical activity, such as gymnasiums, than in classrooms
- made the most use of natural daylight by opening window shades during the day, closing them at night, etc.
- increased the efficiency of school heating systems
- rescheduled night activities, such as athletic events, to daytime hours
- curtailed or eliminated field trips which required the use of school vehicles
- curtailed or eliminated afternoon, evening and weekend use of school buildings
- encouraged car pools for school staff
- discouraged students from driving to school
- encouraged students and staff to wear warmer clothing to school
- developed energy conservation curricula
- considered an extended Christmas vacation, or other changes in the school calendar
- prepared contingency plans in the event of emergency school closure
- established committees on energy conservation

2. The energy crisis has had different effects upon schools in different regions of the country. Reports from northern and eastern states, such as Maryland, Michigan, Illinois and Minnesota, communicate that fuel shortages were already a pressing problem during November. Reports from southern states, such as Texas, Georgia and Alabama, reflect concern during November about possible energy problems more than about real shortages. Shortages of fuel for buses (and escalating prices for available fuel) are nationwide, and these frequently cause more severe problems for school districts than heating fuel shortages.

3. With few exceptions, the emphasis in schools has been on developing short-range methods to cope with this winter's anticipated fuel shortages. Some states and local districts, however, have begun to form long-range energy commissions, committees, and task forces. A few others report that they intend to examine long-range policy after the immediate crisis subsides.

4. More often than not, respondents discussed energy conservation measures, but did not discuss the character of actual energy shortages. Several respondents expressed concern at not knowing the extent or duration of shortages they face. A minority of states and local districts, as in Rhode Island, are monitoring their fuel supplies and collecting statewide data.

State school boards association responses to the energy crisis vary: A few exercise active state leadership, as in Nebraska and New Jersey; most are cooperating with the state government agencies, such as in Iowa and Michigan; some have chosen only to keep aware of the state situation, as in Alabama and Nevada.

December 17, 1973

SCHOOLS AND THE ENERGY CRISIS

ALABAMA (information sent 11/26)

No major crisis yet. While Alabama expects some problems with school building heating, its major problem will be the procurement of fuel for school buses.

Alabama Association of School Boards, and the State Department of Education have considered statewide plans for energy conservation. Steps which have been taken are:

- lower classroom temperatures
- slower vehicle speeds
- tuning of all school vehicles

Bessemer City Schools, Bessemer, Alabama (NSBA Direct Affiliate. Information sent 11/27)

District has been notified by its gasoline supplier that it will be "several hundred gallons" short in December.

Assistant Superintendent for Business Affairs has instructed principals to suspend all field trips, athletic trips, etc., which are not essential. He is asking principals' compliance with the following:

- lower classroom temperatures
- keeping lights turned off when rooms are not in use; discontinuing maximum security lights at night
- discontinuing use of window air conditioning units on warm and mild days
- encouraging energy conservation in the school cafeteria

District staff is encouraging faculty, student and parental cooperation in all areas relating to energy conservation, such as car pools.

"Possibility of Board of Education action, but probably not."

ALASKA (information sent 11/26)

Alaska schools are being affected by cutbacks of energy, and will probably be further affected this winter.

- lower vehicle speeds
- curtailment of mileage payments
- reduce meetings of teachers and principals where travel is required
- preferred parking for autos carrying four or more passengers; charge those not sharing rides but wanting parking.

Deputy Superintendent made a statement at the Energy Crisis Conference called by Senator John V. Tunney November 18, 1973, in which he stressed high priority for education. He also said that the district is developing course offerings in the area of energy conservation as a part of an expanded curriculum in ecology and environmental awareness.

Los Angeles City Schools, Los Angeles, California

"It is doubtful" that the district can secure additional fuel for the entire school year, according to the Superintendent. Major problems are diesel and gasoline fuel.

Board of Education has endorsed curtailment of all school trips other than athletic events, and has urged federal, state and local leaders to aid the district in meeting its energy needs.

Superintendent's energy conservation plan, which will be in effect for at least the months of November and December, includes:

- lower speed for school vehicles
- lower classroom temperatures
- no air conditioning until temperatures exceed 78 degrees
- no boilers on until outside temperatures drop below 70 degrees

("Some Districts Affected by Fuel Shortages," Spotlight, November 21, 1973, and "Energy Economy Strict in Schools," Los Angeles Herald-Examiner, November 16, 1973)

Sunnyvale School District, Sunnyvale, California (NSBA Direct Affiliate)

Energy conservation measures which have been suggested to the Board of Education:

- lower temperatures
- shorten the length of time buildings are heated
- reducing the amount of lighting

Parents may be asked to send a sweater to school with their children ("Sunnyvale Children May Add Sweaters For Classroom Wear," Palo Alto Times, November 16, 1973)

CONNECTICUT (Information sent 12/8)

"At this point, our greatest need is for accurate information about what kind of fuel will be in short supply, how it will be rationed (?), and up-to-date information on regulations."

Education Commissioner initially proposed to close schools from December 14 to January 13; eliminate the usual vacation in April, to make up days lost during the winter; and add any necessary days in June and July to keep the 180-day school calendar.

State Board of Education has taken the following actions, effective December 21:

- schools are to close at 4 p.m. each day through April 15
- schools will be closed from December 21 to January 7
- schools cannot adopt a four-day week "as a regular practice, regardless of whether the length of the school day is lengthened or not"
- schools are not to request authorization for a shortened school year due to fuel shortage
- districts are to prepare a contingency plan for an extra week of vacation during February, and submit the plan to the Commissioner
- districts are to report their fuel consumption to the Commissioner semi-monthly
- schools are "recommended" to implement the energy-saving suggestions circulated by the Commissioner "to the fullest extent possible"

Connecticut Association of Boards of Education, Inc.'s greatest concern has been that the State Board of Education does not have the power to mandate calendar changes, and it has issued a position statement to this effect. Following the State Board action, CABE recommended local school districts to "adopt a course of action which is appropriate to meet the needs of your school district and responsive to the needs of the State and Nation to conserve energy without sacrificing our legal responsibility to provide good public schools."

State Department of Education has requested individual districts to work out their problems as they see fit; and will be available for help upon request. State Association of Alaska School Boards is recommending that each district "review their total operation and cut back on energy where they can. They should also seek alternatives to current operating procedures." According to the Association of Alaska School Boards, most districts have lowered classroom temperatures and have avoided the use of unnecessary lighting. One district has eliminated all evening programs and closed the swimming pool. Anchorage will be investigating alternative means to lighting for security checks.

ARKANSAS (telephone interview 11/29)

Schools are currently affected "to some degree." A few gasoline suppliers are cutting back 15 per cent. Schools using butane and propane will be supplied, but the price has tripled. New natural gas will be available to Arkansas in December or January.

A Governor's plan for conservation of energy is in the works.

Arkansas School Administrators Association has requested that schools receive priority.

Arkansas School Boards Association plans to make a resolution at January convention.

CALIFORNIA

Local districts fear they may run out of fuel after January 1 when many fuel contracts are scheduled for renewal. Schools throughout the state are already experiencing cutbacks in diesel fuel from suppliers. At least five counties - Fresno, Monterey, Sacramento, San Diego and San Joaquin - have had their bus fuel supplies reduced. Schools in El Dorado, Merced, Mono and Stanislaus counties are "alarmed" because they depend upon propane for heating, and that fuel is being cut back. ("Fuel Crisis May Shut Some Schools in 1974," by Jack McCurdy, Los Angeles Times, November 9, 1973.)

State Deputy School Superintendent has predicted that some California schools probably will be forced to close early next year, and others will curtail bus transportation unless the impact of the fuel shortage is averted.

Rim of the World Unified School District, Lake Arrowhead, California
(NSBA Direct Affiliate. Information sent 11/28)

District expects to be 8,000 - 10,000 gallons short of diesel and gasoline fuels by year's end.

Is in the process of developing an energy conservation plan. Measures which are under consideration:

- slower vehicle speeds
- more efficient scheduling of vehicles
- personnel taking trucks home at night and over weekends to avoid theft of gasoline

County Superintendent of Schools has arranged for all superintendents and supervisors to meet with a representative of Standard Oil Company of California on December 11.

District will be making a decision "within the near future" on curtailment or elimination of educational field trips and high school athletics.

San Diego Unified School District (Materials dated November 15, 1973.)

District has a commitment with its supplier company for fuel oil to last until the end of this year; but has been unable to enter into contract because the company did not have a firm commitment from its supplier. The major problem is fuel for buses; although energy for lighting and heating are also a problem. District is also having difficulties with shortages, late deliveries and price increases in its paper products and food supplies.

Energy conservation proposals currently under consideration by board of education:

- make maximum use of daylight
- keeping lights turned off when rooms not in use; reducing lighting during the day where daylight is available; minimum exterior lighting and no inside lighting at night; night meetings curtailed
- elimination of night athletic events or any other activity that required night lighting of fields.
- lower classroom temperatures
- limit use of hot water (such as in showering facilities)
- heating systems turned off when classrooms and offices emptied, and completely shut down over weekends.

DELAWARE (Telephone interview, 12/4)

"No real trouble; schools are high priority now, above homes and some businesses, but all is tentative." Oil cutbacks are anticipated for January and February.

State plans are in progress. Governor received legislative mandate to affect operation of state government until January 31. The Governor has issued an executive order which lowers building temperatures.

The State Department of Public Instruction has established an energy committee.

The State Board of Education has

- extended Christmas vacation through January 4; no lost time is to be made up
- mandated 4-day school weeks during February
- urged students not to drive to school
- advised cut back in use of buildings for extracurricular activities

The Delaware School Boards Association has been participating in all state-level discussions.

DISTRICT OF COLUMBIA (Information sent 12/3)

The Superintendent has issued a set of energy conservation guidelines "to be implemented immediately:"

- reduced temperatures
- close windows
- avoid unnecessary lighting
- avoid use of relocatable buildings which are heated by electricity during the period December 1 - March 15
- reschedule athletic events requiring stadium lighting to daytime hours
- school-wide poster contests on energy conservation slogans
- advise parents to ensure that children are warmly dressed

FLORIDA (Information sent 12/4)

Major problems are diesel fuel and gasoline. "Schools in Florida will be in more trouble next spring if air conditioning is not available. (Modern schools without windows are the rule in Florida.)"

State Education Commissioner has sent all schools a list of recommended economy measures. (Education USA)

State has ordered each school district to put into effect a comprehensive plan for energy conservation and file a copy of the plan with the state. (New York Times)

Dade County Public Schools, Miami, Florida (NSBA Direct Affiliate. Information sent 11/27)

"Present operating levels appear to be maintainable through the winter."

School board policy is one of voluntary conservation. Superintendent issued the following guidelines to principals, department heads, and administrative staff:

- boiler use restrictions
- cold water detergents for laundry services
- discontinued all field trips
- urged car pools when possible
- more efficient scheduling urged of vehicles delivering materials or providing services
- lower speeds for school vehicles
- lower classroom temperatures
- shorter hours for air conditioning units
- consolidated evening classes in a single area of building where possible
- units shut off over weekends and holidays
- minimum security lighting
- no exterior lighting during the daylight hours
- turn off lights when areas are not in use
- shut off electrically powered equipment when not in use

GEORGIA

Shortages of gas and diesel fuel present statewide problems with student transportation.

State Board of Education approved a resolution at its November meeting which calls for the federal government to adopt measures which will circumvent the problems resulting from the fuel crisis. The resolution requests the Secretary of the U. S. Department of the Interior to intervene on behalf of Georgia schools to see that sufficient fuel be made available to heat the schools, and to devise a formula that would assure local boards of education an adequate supply of gasoline.

State Superintendent of Schools was to have discussed with local school superintendents the possibility of an extended Christmas vacation, with the missed days being made up during the spring holidays or on Saturdays. ("Georgia Board of Education Approves Fuel Crisis Resolution," Barnesville, Ga., News-Gazette, November 15, 1973) Some districts have accepted the recommendation for an extended vacation, some have rejected it.

HAWAII (Information sent 11/30)

Fuel supply is "adequate."

State Department of Education is awaiting a meeting with State Energy Coordinator before taking any action.

Department has developed an energy conservation plan. All Department of Education personnel have been requested to

- -keep engines tuned for maximum utilization of fuel
- -reduce warm-up time; avoid sudden starts
- -lower school vehicle speeds
- -consolidate trips; pool rides; use buses; review the number of field trips
- -turn off lights
- -turn off air conditioning equipment and other electrical equipment when not in use
- -turn off night lights during daylight hours and over holidays and week-ends

Further plans "being investigated" (to be discussed with state coordinator)

- -reduce bus route mileage
- -consolidate bus stops
- -buses carry capacity loads

IDAHO (telephone interview, 11/26)

Schools heated by oil have not been able to get firm commitment on price or quantity from their suppliers. At this time, "it is on a day-to-day basis." Since cold weather has not yet set in, no heating problems yet.

Idaho School Trustees Association was the first to call for planning. It is working in conjunction with the State Department of Education and other agencies to establish a committee for anticipating the state's energy problems and devising solutions.

Schools have indicated that they will lower classroom temperatures and allow students to wear extra clothing to school.

ILLINOIS (information sent 11/26)

A statewide survey of 848 school buildings which use fuel oil or LP gas indicated that 677 buildings were without guaranteed fuel supplies to last through the winter. As many as 166 school districts had been unable to obtain commitments from gasoline suppliers, the survey found. (news release, Office of the Superintendent of Public Instruction, August 27, 1973)

Office of the Superintendent of Public Instruction is operating a fuel shortage "hot line" which attempts to match fuel suppliers with surpluses with school districts seeking assistance in locating fuel. It has also established an Advisory Committee for School Energy Planning.

State Superintendent of Public Instruction has asked the legislature for authority to permit schools to close without penalty during the winter to conserve energy. State Superintendent has also recommended that public schools running short of fuel close for two weeks in January to conserve their supplies, and make up the lost time later. ("Let Schools Shut If Struck by Fuel Shortage," by G. Robert Hillman, Chicago Sun-Times, November 17, 1973) He has also issued a lengthy set of energy conservation guidelines and urged schools to develop energy conservation educational materials and curriculum.

Illinois Association of School Boards executive director is serving on the OSPI Advisory Comittee; director of legislative services has testified before a special legislative committee.

Chicago Public Schools, Chicago, Illinois (NSBA Direct Affiliate)

OSPI survey found that none of Chicago's 231 school buildings which heat with fuel oil had received commitments from suppliers. This is 38% of the city's schools. (news release, Office of Superintendent of Public Instruction, August 27, 1973) A school board member has asked the board to consider a plan to close the schools in January or February if severe energy shortages develop ("Let Schools Shut if Struck by Fuel Shortage", by G. Robert Hillman, Chicago Sun-Times, Nov. 17, 1973). Classroom temperatures have been lowered to 70 (Cooler Apts., Seen," by Paul McGrath, Chicago Sun-Times, Tues. November 27, 1973) Officials of the Chicago Teachers Union have said that the union will appose any attempts to conserve fuel by lowering thermostats below 69 degrees, or by reshuffling school schedules so that classes would be dismissed during winter months and in session during the summer. ("Teachers Union to Fight Heating Cuts," by Jack Fuller and Alan Merridew, Chicago Tribune, November 11, 1973)

Cook County Superintendent of Schools, Chicago and surrounding suburbs

Superintendent has cautioned all district superintendents "to exercise great care and prudence" when implementing energy conservation policies, to protect "the health, safety, and welfare of the children." He has suggested:

-not to lower classroom temperatures below 70 degrees
-use caution in temperature control of showers and locker rooms for swimming and physical education students
-use temperance in reducing lighting, so as not to increase vandalism and theft
-any tendency to raise cafeteria refrigeration temperatures should be watched to guard against food spoilage
(news release, Educational Service Region, Cook County, November 29, 1973)

Crete-Monee School District 201 U, Crete, Illinois (NSBA Direct Affiliate. (information sent 11/27)

Since all school heating is by gas, the district "does not anticipate any problem."

Energy conservation steps which have been taken:

-curtailment of field trips and special bus runs
-lower classroom temperature
-reduced heat at night, and over the weekends, and vacation periods
-all burners have been adjusted to maximum efficiency
-limited after school use of the building to necessary programs

No Board of Education action at this time.

Community Unit School District #2, Marion, Illinois, (NSBA Direct Affiliate)

"January and February will be the crucial months. We are already doing everything possible to conserve fuel," the superintendent reports. Bus fuel is in short supply and heating fuel is only guaranteed by the supplier through December. (Marion, Ill., Republican, November 21, 1973)

Peoria School District #150, Peoria, Illinois (NSBA Direct Affiliate)

No uniform directive has been issued by the school districts' administration, but schools have been asked to cooperate.

Energy conservation steps which have been taken:

-lower classroom temperature
-dim unnecessary lighting
-cancel field trips
(Peoria, Ill., Morning Journal Star, November 20, 1973)

Springfield Public School District #186, Springfield, Illinois (NSBA Direct Affiliate)

A first round of cutbacks was announced November 20, including reduced heat, light, and vehicle speed. A joint teacher-parent-student conference was to meet early in December to assess other possible cuts. Springfield schools are heated by natural gas, making the situation less critical than in many districts. (Springfield, Ill., State Journal, November 21, 1973)

INDIANA (information sent 11/26)

"The severity of the problem is impossible to determine. While there are fuel allocations for local schools, no problems have occured as yet. This is partially due to a warm fall."

The Governor's office, through the Department of Commerce, chairs an Energy Committee which is coordinating monitoring action. So far, the committee has only acknowledged that there may be a problem.

Department of Public Instruction is compiling a list of "energy-saving" suggestions to distribute to local schools.

Indiana School Boards Association has been urging local boards "to have an established plan for saving energy, but not to overreact and announce future school closings at this time." The association is "working closely" with state governmental agencies.

Hammond Public School District, Hammond, Indiana (NSBA Direct Affiliate)

Hammond schools "began taking fuel conservation precautions in mid-November." Steps taken include:

-reducing classroom temperature to 68 degrees
-lowering building temperature when buildings are not in use (Hammond, Ind., Times, November 23, 1973)

Indianapolis, Indiana

District has been advised by its fuel oil supplier that its allocation, based on the monthly use last year, will be reduced initially by 4% this year.

School board has approved these fuel conservation measures "for immediate implementation:"

-lower classroom temperatures
-instruct all custodial and maintenance workers in fuel conservation
-develop energy crisis units in science and social studies classes
-curtail the scheduling of evening and weekend activities in buildings; attempt to reschedule existing activities to late afternoon hours
-eliminate field trips that are not contracted
-review all bus routes
-develop car pool for personnel assigned to each building

"Consideration of the following actions may be necessary if the fuel shortage becomes more severe:"

-lower classroom temperatures further
-cancel all evening and weekend use of facilities
-reduce inside city travel allowances
-cancel heat in all non-classroom large areas such as libraries, gymnasiums, auditoriums, and swimming pools
-cancel all field trips
-extend Christmas vacation to four weeks and make up days missed by having school on Saturdays or cancelling spring vacation
-close schools on days when outdoor temperature is predicted to be abnormally low for two or more days (Report of the General Superintendent, November 13, 1973)

Rensselaer Central School Corporation, Rensselaer, Indiana (NSBA Direct Affiliate)

All bus transportation of pupils other than daily to and from schools has been cut. "Athletic teams, bands, and other performing groups will have to find and pay for their own fuel if they wish to travel." (Rensselaer, Ind., Republican, November 16, 1973)

IOWA (information sent 11/26)

Iowa Association of School Boards participated in a November 7th meeting of all education-related organizations in the state, chaired by the State Superintendent of Public Instruction and members of the State Energy Priorities Committee. IASB has not adopted a specific policy concerning the energy crisis, but anticipates encouraging local districts to comply with state recommendations.

Department of Public Instruction has recommended that each school district develop an energy conservation plan. It has suggested these measures:

-lower building temperatures
-ask students, teachers, and others to wear warm clothing
-improve the efficiency of school heating systems
-turn off all unnecessary lights
-use minimal outside lighting
-reduce temperature of hot water
-shut off circulating pumps during non-occupancy hours
-shorten extra-curricular activities
-schedule extra-curricular activities, where possible, during the day; combine public performances on the same evening
-eliminate practices during Christmas vacation
-at least one day of cold lunch
-more efficient operation of bus engines
-lower speeds for school vehicles
-require students to ride buses rather than drive cars
-cancel out-of-town educational trips, senior trips
-operate buses at capacity; eliminate excessive number of stops
-reduce use of driver education car

Other "alternatives" suggested by the Department, if the above suggestions are not sufficient:

-lengthen the Christmas holiday by two weeks
-an extended school day for four days a week
-kindergarten classes every other day all day to eliminate kindergarten routes
-year-round school

Iowa Education Association is strongly against any extension of contract into the summer months, but does favor an extended four-day teaching week.

The largest 24 school districts in Iowa are opposed to the extended four-day week, and have sent a letter to the Governor stating their position.

Governor has said that some schools may be forced to close because of the fuel crisis. (Education USA, November 12, 1973) He has appointed a State Energy Priorities Committee to study ways of reducing fuel consumption.

Jefferson, Iowa

Superintendent tried for more than five months to get enough fuel oil for district's needs. "He has some now, but no one is certain whether it will be enough to operate all winter." ("Energy: Iowa Town Mutes Its Carillon to Save on Fuel," by Seth S. King, New York Times, November 18, 1973.)

KANSAS

A bill to be introduced in the 1974 session of the state legislature would allow local school districts to operate for less than 180 days or for more or less than six hours per day. ("Committee of Legislature Approves Actions," Week in Review, Kansas Association of School Boards, November 16, 1973)

Dodge City Unified School Dist. #443, Dodge City, Kansas (NSBA Direct Affiliate. Information sent 11/26)

Relies almost entirely on natural gas for heating purposes, so "our fate is pretty much in the hands of others." So far, the district has been receiving the same allocation of gasoline for buses that it received last year which is sufficient. However, the district is paying considerably more for that gasoline this year, since no bids were received.

"At this time, no real problem has developed here due to fuel shortages. I suppose our only real problem is that we do not know what to anticipate."

The district has lowered classroom temperatures, and plans to shorten non-teaching staff lunch hours and the work day by one-half hour to conserve gasoline normally used at noon.

According to the Superintendent, "the lowered room temperature concept certainly has a tendency to reduce incentive on the part of students and staff."

KENTUCKY (Information sent 11/29)

"It i. a little early to determine the extent of the energy crisis on the schools in Kentucky." Some districts are operating on a week to week basis with their gasoline supply to operate their school bus fleets.

Some school districts have already restricted the use of school buses to transport pupils to classes only; some have restricted the use of school facilities, especially at night, to any non-school related function; and districts are lowering thermostats.

Governor has requested the State Superintendent of Schools to conduct an emergency statewide survey of energy consumed in heating school facilities, so that the impact of potential cutbacks in heating fuels can be assessed. "If survey results indicate a severe pinch, it is possible that schools may be included in priority groups by the state."

State Superintendent of Schools is now considering a recommendation to the State Board of Education to ask school districts to lengthen the school day and reduce the school week to four days.

Kentucky School Boards Association has taken no action, but it is in "close contact and liaison with our State Department of Education, and that agency is working with the Governor and his special Commission on Energy."

LOUISIANA

Orleans Parish Public School District, New Orleans, Louisiana (NSBA Direct Affiliate. Information sent 11/27)

District has established a Task Force on Energy Conservation.

Superintendent has instructed all employees to:

-lower building temperatures
-turn off lights whenever possible
-lower speeds of school vehicles

District expects to be taking further steps to conserve energy as the work of the commission progresses.

In addition, contingency plans have been drawn up for local weather above freezing, and sub-freezing local weather; in the event school gas consumption must be curtailed to an absolute minimum.

MAINE (telephone interview 12/6)

Fuel oil and gasoline are being conserved, but supplies appear adequate for December. A few districts have run short of fuel or gasoline, to the point of having to make emergency efforts to get supplies, but so far no schools have closed.

Governor has asked the legislature for a number of emergency powers, including the power to close schools. (Legislature meets January 2. This will likely be a priority item, and the Governor could get his powers by the second week in January.)

State Commissioner of Education has issued a non-legal advisory to districts to extend vacation by three days and to postpone extra-curricular activities. (Since no days have been cut from the requirement of 180 days of school, the three days at Christmas and any other lost days presumably will be made up during warmer weather.)

State School Boards Association, Inc., of Maine has participated, upon request, in advisory meetings to the state commissioner.

MARYLAND (information sent 11/28)

Schools have been able to contract for only half of the 22.5 million gallons of Number 2 fuel oil they need to heat classrooms. "Outlook is not nearly so bleak" for Number 4, Number 5, and Number 6 fuel, as most school systems have commitments for deliveries to meet their needs. However, total conversion to Number 6 fuel, if necessary, is considered impractical and impossible. (October 29, 1973, news release from the State Department of Education)

Governor was the first governor in the nation granted the power to close schools in an emergency. (Education USA) He has asked school officials to voluntarily adopt rules that would prohibit students from driving automobiles to school if they have access to other means of transportation. ("Mandel Seeks Curb on Student Driving," by Edward Walsh, Washington Post, November 30, 1973)

State Department of Education has "resolved" to:

-keep equipment operating at maximum efficiency
-lower temperatures during the day and at night
-develop a conscious concern among users of school facilities of the need for energy conservation

The Department is prepared to take the following actions if conditions require them:

-eliminate evening and weekend programs, including athletic events; reschedule some events to daytime hours
-eliminate adult education classes

"In the event of a crisis, the daytime instructional program will be the last affected activity." (Joint Statement on Impending Fuel Crisis by Maryland School Superintendents and Maryland State Department of Education, November 2, 1973)

Maryland Association of Boards of Education has taken no action and does not expect to take any in the future, since problems caused by the energy crisis will be handled directly by the State Department of Education and the State Superintendent of Schools.

Board of Education of Carroll County, Maryland (NSBA Direct Affiliate)

Board has directed staff to implement state guidelines as they pertain to schools and the energy crisis, including a set back of all thermostats. (Board of Education of Carroll County, Westminster, Maryland, news release, November 26, 1973)

Harford County, Maryland

Schools will be receiving fuel only in the amount used in the previous year. In addition, the district has had 2,000 gallons of its fuel stolen.

Board has passed a resolution on a four-phase plan. These steps have been taken to implement Phase I:

-lower temperatures
-night setting as soon as students are dismissed
-keep doors and windows closed
-turn off unnecessary lights
-maintain heating and ventilating equipment proper condition

The other three phases are to be implemented as need dictates, by the Superintendent, after conferring with the Board President. They involve the curtailment of after-school activity, cancellation of after-school activity; and altering the curricular program after "all other phases have been implemented and no other alternatives are feasible." This phase might include cancelling field and athletic trips, or altering the school calendar. ("Schools Plan Fuel Crisis Measures," newspaper article.)

Prince George's County, Maryland

A memorandum to principals has called for:

-lower temperatures
-turning off lights
-not opening windows

If conditions worsen, the district is prepared to eliminate evening school and use of the school by outside groups at night. There is no plan to cut school hours. ("Schools, Stores to Reduce Temperatures to Save Fuel," by Judy Nicol, Washington Post, November 8, 1973)

Montgomery County, Maryland

Fuel suppliers have assured the district that they will try to meet its fuel needs this year. "But, if there are further changes in the oil supply situation, or prices continue their sharp rise, we could be in serious trouble," Superintendent has said.

Board was to have considered a resolution at its November 13 meeting related to energy crisis. Under consideration prior to the meeting were these energy conservation measures:

-lower temperatures
-alternatives concerning afternoon, evening, and weekend use of buildings
-keeping windows, doors closed; shades and blinds open during the day and closed at night
-operate heating equipment at maximum efficiency
-turning off lights when not in use
-using other electrical equipment only when necessary
("Fuel Crisis Looms," The Superintendent's Bulletin, Rockville, Maryland, November 12, 1973)

MASSACHUSETTS (information sent 11/26)

Suppliers are informing school districts that they will be supplied fuel only in the amount used the previous year. Some suppliers are cutting back 10-15%.

State Department of Education has held public meetings and met with the Massachusetts Educational Conference Board, which includes representatives of most of the major education associations in the state.

Commissioner of Education has "advised" all superintendents to:

-take self-imposed action for reducing fuel and energy consumption by 20-25%
-take steps to set a similar reduction target for gas consumption
-heighten student awareness of and involvement in energy conservation through instructional programs

The Department intends to conduct regional workshops for superintendents and maintenance personnel, issue technical information bulletins, and serve as an information clearing house. Commissioner of Education plans to recommend to the State Board of Education that emergency regulations be adopted on a contingency basis to permit reducing the minimum school day and minimum school hours per year. He is not recommending a school calendar change at this time. (Commissioner of Education, Advisory Memorandum for Superintendents of Schools, RE: Recommended Actions Regarding the Energy Crisis, November 27, 1973)

Massachusetts Educational Conference Board, which has been serving as an ad hoc committee to the Commissioner of Education to plan for energy conservation by the schools, has voted that schools receive a high priority in fuel allocations after health and safety agencies. It will convey its view to the Governor's energy task force.

Massachusetts Association of School Committees, Inc., is a member of of the Massachusetts Educational Conference Board. The President of the Association met with the Governor on November 27, and will make recommendations based on the outcome of the meeting.

MICHIGAN (information sent 12/3)

School Districts "having the most difficulty at this time are those who are on interruptable gas service." Several schools have had gas services interrupted for the remainder of the year and having difficulty getting fuel oil as their allocation is low because they were interrupted for very minimum periods previously. Districts heating with gas and not on interruptable service "seem to be in the best shape" at this time. Some schools have had difficulty getting commitments on gasoline, but have managed with emergency allocations. Most districts will probably "feel the gasoline pinch" before the winter is over.

Department of Education survey indicates 67% of the public schools will be short almost six million gallons of gasoline and nearly five million gallons of fuel oil this school year; or a shortfall of 25% for both fuels. (Department of Education Memorandum, "Daily Status Report of the Survey of Gasoline and Fuel Oil as of 11/29/73")

So far, no schools have closed, though some have closed buildings and doubled up in other buildings to meet the crisis.

Governor has requested the State Superintendent of Public Instruction to examine "all feasible alternatives with repect to school scheduling and use of school facilities" and to develop recommendations which would reduce fuel consumption in the schools.

State Board of Education has requested those school districts which believe they will be unable to be open for 180 days because of the energy crisis to inform the State Board rather than accept the State Superintendent's proposal to extend the usual ten-day Christmas vacation to 20 days. It has directed the State Superintendent to prepare recommendations regarding energy conservation and fuel shortages; and to explore long-range alternatives for meeting energy problems.

State Department of Education has released suggestions for conserving energy to all districts, and has urged districts to voluntarily put these suggestions in effect. Suggestions included:

-lower temperatures
-begin reheating of the building no more than 1-1/2 hours before classes begin
-encourage the wearing of warm clothing by students and staff
-close the window drapes
-consider the curtailment or consolidation of after-school and evening activities; and, consider conducting such activities under reduced temperatures
-ensure that heating units are operating at maximum efficiency

Department also issued suggestions for conserving of gasoline, recommending that "particular attention should be given to the identification of transportation priorities." Suggestions included:

-limiting the number of bus stops
-requiring pupils to walk a greater distance to the main route
-transportation of no pupils within 1 1/2 miles of the schools they attend
-protection of the bus fleet and gasoline supply from theft
-elimination of nonessential bus travel such as to distant bus storage locations
-reduction of travel for 'low priority' education activities; reduction or elimination of travel for recreational activities

-extensive conservation measures which could be implemented by the bus drivers and mechanics. ("Suggestions for School Districts on the Conservation of Energy," Bulletin No. 1, Michigan Department of Education, November, 1973)

Department has appointed a task force to work on the energy problems of the schools. Though emphasizing immediate solutions, the task force intends to explore a long-range approach. Several education groups, including the Michigan Association of School Boards, have appointed consultants as resource persons for this task force.

Michigan Association of School Boards has taken no action at this point for "serving as a resource person and keeping local boards informed of the situation." It is considering, in cooperation with the Michigan Association of School Administrators, issuing energy conservation recommendations to school districts. At this point, the Association has urged districts to follow the Department of Education suggestions.

Flint School District, Flint Michigan (NSBA Direct Affiliate. Telephone interview 11/28)

District does not anticipate any problems.

It has:

-locked all thermostats at 68 degrees
-encouraged the turning off of unnecessary lights

No further action is anticipated at this time.

Haslett Public Schools, Haslett, Michigan (NSBA Direct Affiliate. Information sent 11/30)

Schools and busing programs have not experienced any adverse effects at this time, although district expects "certain effects within the next few weeks."

Fuel conservation steps which have been taken:

-lowered temperatures
-exclusion of all weekend activities, except for high priority school activities
-elimination of week night use of school buildings by outside groups, except for local youth-sponsored activities
-curtailment of all poorly-attended night recreational and/or adult education activities
-disconnection of almost 30% of the light fixtures in the district

District is establishing an energy conservation committee.

All spectator buses have been eliminated, and administration and board are considering the possible elimination of the following, in order of priority:

-field trips
-bus transportaion for students living within 1 1/2 miles of school
-bus transportation for middle school athletics
-transportation to all special school-sponsored activities
-bus transportation involving high school athletic contests

Mona Shores School District, Muskegon, Michigan (NSBA Direct Affiliate)

District has:

-lowered classroom temperatures
-closed window drapes at night
-eliminated unnecessary outside lighting
-asked for recommendations from the principals of each building ("Shores Finds Ways To Cut Energy Use," Muskegon, Michigan, Chronicle, November 22, 1973)

Mount Pleasant School District, Mount Pleasant, Michigan (NSBA Direct Affiliate)

All Mount Pleasant schools except one are heated by natural gas. While the district is not confronted with a gas shortage, "this is not to say we aren't going to conserve what we have."

All building administrators have been requested to review their heating and lighting practices along with their head building custodians, and to initiate, if not already in effect, a workable conservation effort. ("Schools Cutting," by Darlene Dwiatkowski, Mt. Pleasant, Michigan, Times-News, November 20, 1973)

MINNESOTA (information sent 11/30)

"Minnesota will be one of the states hardest hit by the cutback in energy." Only 88 of 438 school districts are guaranteed they can stay open. Problems: gasoline, fuel oil, and natural gas.

Minnesota School Boards Association executive director has been appointed by the Governor to serve on a state commission. He is the single representative for all facets of education.

Schools rank 19th on a list of 21 priority groups for fuel allocations.

Special School District #1, Minneapolis, Minnesota (NSBA Direct Affiliate. Information sent 11/28)

Schools and busing programs are not affected at the present time. "Our current supplier of fuel oil and gasoline feels that unless there is intervention from the federal level, we will have sufficient fuel to get through this school year."

> District is in the process of drafting a plan for conserving fuel in the event of complete fuel exhaustion. Plan will be submitted to the State Department of Education.

Independent School District #625, St. Paul, Minnesota (NSBA Direct Affiliate)

Schools are facing an 18-20% decrease in fuel supplies.

> St. Paul Public Schools fuel crisis committee has prepared a list of recommendations for the Board of Education, ranging from limiting the use of schools in the evening, to holding classes on warm Saturdays. ("City Schools Ponder Fuel Solutions," by Jackie Roedler, St. Paul, Minn., Pioneer Press, November 18, 1973)

MISSISSIPPI

Grenada Municipal Separate School District, Grenada, Mississippi

At mid-November, district was short 2,000 gallons of gasoline needed to operate school buses for the month. The district hoped to get by with the help of several gas distributors in the area who should have had small surpluses this month. ("School System Finds Enough Gas to 'Get By'," by Peggy Scott, Grenada, Miss., Sentinel-Star, November 15, 1973)

Oktibbhea County School System and Starkville Municipal Schools, Starkville, Mississippi

Distributor providing the county system with gasoline received a gasoline cut of 10% which was passed on to the school system.

> Schools in both districts closed early for the Thanksgiving holidays to conserve energy. ("Oktibbeha School Holidays Extended," West Point, Miss. Times-Leader, November 15, 1973)

MISSOURI (Telephone interview, 11/26)

No substantial effects have occurred, beyond some widely scattered rural districts which are having difficulty obtaining propane and gasoline.

Lexington R-V School District, Lexington, Missouri (NSBA Direct Affiliate. Information sent 11/29)

Schools and busing programs are currently unaffected, and should not be affected this winter.

District has reduced classroom temperatures and reduced the usage of buildings.

Versailles, Missouri

Natural gas supply has been cut off. District has sought to purchase automatic wood-burning heaters.

MONTANA (information sent 11/26)

Fuel costs are up 10%. State anticipates "dramatic increases" in Canadian gas prices by July 1, 1974. Meanwhile, oil and propane for rural areas is in short supply. No actual shortages of fuels yet.

Gasoline shortages will probably curtail extracurricular activities this winter.

School districts will cooperate with officials in making necessary reductions.

NEBRASKA (information sent 11/27)

A recent Nebraska State School Boards Association survey of 35 school districts indicated that 12 of the districts anticipate heating fuel shortages, with five other districts uncertain. Most of these affected districts use natural gas, and are on interruptable service. Three of the districts anticipating shortages rely upon propane. There were "frequent complaints" about the cost of fuel.

The survey showed that four of the districts anticipating shortages and two not anticipating shortages have completed formal plans for coping with the energy crisis. Several other districts said they are working on plans.

The Nebraska State School Boards Association is serving as the contact between local school districts and the State Allocation Officer; and NSSBA is serving as an information clearinghouse. NSSBA has requested Nebraska schools to collectively reduce their energy consumption by 20%. NSSBA offered school districts these suggestions for conserving fuel:

-four-day week, with each day 90 minutes longer
-closing buildings on sub-zero days
-reducing temperatures
-curtailing activities outside of school hours
-curtailing field trips and activity trips
-lowering bus speeds
-using small vehicles wherever possible
-contracting with parents to transport pupils
-consolidating bus routes

Scottsbluff School District, Scottsbluff, Nebraska (NSBA Direct Affiliate. Information sent 11/27)

Schools and busing programs are currently unaffected, although "there may be some curtailment of activities that entail the use of school buses" this winter.

Steps which have been taken to conserve energy:

-thermostats turned down throughout the school plant
-better use of daylight and a reduction in artificial lighting has been encouraged

School board "has discussed and is totally aware of the energy crisis as it affects our schools, and has approved the policy of lowering thermostats and curtailing activities as needed."

NEVADA (information sent 11/27)

Schools are currently getting fuel deliveries, but are paying up to 25% more for oil. All school districts are getting sufficient gasoline, but prices have risen.

All schools have taken action to conserve heating fuels, and voluntary action is being taken to reduce vehicle use where possible. Districts are not anticipating any cutback in the number of school days, or any school closures. "There may be some shifting of schedules to shorten the school days."

Nevada State School Boards Association has not taken action with regard to the energy situation.

Washoe County School District, Reno, Nevada (NSBA Direct Affiliate. Information sent 11/26)

District has developed a fuel conservation plan in an attempt to reduce all fuel consumption by approximately 25%.

The following measures were instituted by or approved by the Board of Trustees:

-reduced temperatures
-light meters checking all lights in the district
-technical changes in the setting of all fresh air intakes
-instituting energy conservation units in the curriculum

Although school buses have not yet been affected, "this could change at any moment. It is anticipated that field trips will be sharply reduced within the foreseeable future."

District is in the process of developing "back up" programs in the event of a brownout: replacing hot lunches with cold lunches; turning off welding units and kilns in shop and craft classes.

"In respect to future measures, the Trustees have placed special emphasis upon the educational responsibilities that our schools have for teaching children about the importance of energy conservation."

NEW HAMPSHIRE (information sent 11/27)

Short supply of Number 2 oil. According to one source, busing programs have not been affected as "New Hampshire busing is quite different from other areas. If we curtail busing, the kids just can't get to school."

State Board of Education has issued a lengthy memorandum detailing "recommendations and guidelines for immediate implementation" to all school districts. They include:

-reduce thermostats during the day, nights, and weekends
-heat only those parts of the building used or occupied by people
-curtail use of buildings to essential activities
-reduce speed on all school vehicles
-reduce bus trips that are non-essential or not legally required
-reduce use of electricity
-improve efficiency of heating systems
-immediate and long-range educational programs dealing with heat and fuel conservation

A meeting of superintendents held November 30 was to have discussed alternative school calendar arrangements: 10-day reduction, realignment of the 180-day calendar, four-day school week, redistribution of students. Currently, the 180-day school calendar may be reduced to 170 days upon application to and approval by the Commissioner of Education.

State Board of Education and State Department of Education have also a set of guidelines to aid local school officials in preparing contingency plans.

New Hampshire School Boards Association has been "in on the planning."

NEW JERSEY (information sent 11/27)

School boards are "beginning to feel the 'crunch.'" Many boards have either not received any bids for the 1973-74 school year; have had their supplies under contract reduced by the suppliers; or have had suppliers default completely on negotiated bids and agreements. "Needless to say, schools will be affected this winter if [this is]...any indication of what is to come."

New Jersey School Boards Association has distributed to its membership a fact sheet on the mandatory allocation program for middle distillates. The Association is acting as a liaison between individual boards, the Oil Heat Council of New Jersey, and the U. S. Department of Interior's Office of Oil and Gas. It is also working closely with the State Department of Education and the New Jersey Division of Civil Defense, Emergency Preparedness agencies which have been appointed by the Governor to coordinate plans for the conservation of energy.

The following recommendations have been proposed to the State Board of Education for their immediate action:

- eliminate or curtail all after-school extracurricular activities; eliminate field trips which involve vehicular travel; schedule interscholastic sports, where possible, during the day
- eliminate weekend, and reduce evening, use of school buildings
- eliminate or reduce pupil transportation being provided for distances less than the state mandated mileage limits
- eliminate all home to school transportation by student-driven vehicles; prohibit student parking privileges
- building principals should develop car pools through cooperative planning with faculty and other building employees
- each district should encourage parents to have students dress more warmly
- operate buses at full capacity loads; substitute smaller vehicles for full size buses where routing so indicates

In addition, the NJSBA has proposed that school scheduling be revised during the December-March period, and that boards be permitted to use any and all of the following options:

- extend Christmas vacation to January 7
- create a mid-winter recess the week of February 17th, in lieu of Easter vacation or shortening the school year
- initiate a four-day school week through the winter months - January, February, and March

"It appears at this time that the New Jersey State Department of Education will recommend to the State Board of Education that options 1 and 2 be immediately instituted."

NEW YORK (telephone interview)

State Board of Regents has urged all schools to:

- develop energy conservation plans
- prepare plans for obtaining fuel and learn about emergency procedures of the federal fuel allocation program
- begin preparing contingency plans
- plan and launch a program for educating students, parents and the public about energy use and conservation ("The Energy Crisis and the Schools," by Thomas Hobert, The New York Teacher, December 2, 1973)

State Education Department has issued a set of recommendations for conserving gasoline in pupil transportation programs through the chairman of the Department's Task Force on Fuel Allocation and Conservation. School administrators were cautioned to develop their own contingency plans if the recommended measures do not result in a 15% savings of gasoline. In developing these contingency plans, the Department suggested that local administrators consider:

- reexaming the efficiency of the entire transportation system
- evaluating the consolidation of bus stops
- evaluating athletic and curricular field trips
- eliminating or reducing some or all late-activity buses
- staggering opening and dismissal times between and within buildings for maximum transportation efficiency
- replacing larger buses which are partially filled, with smaller vehicles, if possible
- exploring multi-district transportation services
- evaluating the district distance eligibility policy

Department intends to maintain a "full annual session of not less than 180 days." (State Education Department, news release, December 4, 1973)

The state has established an interdepartmental fuel hot line. School boards have been urged to use this hot line for emergency assistance in obtaining fuel, and for information about its availability. (Negotiation News, New York State School Boards Association, November 21, 1973)

New York State School Boards Association has been "working with the State Education Department and will continue to do so."

Cayuga County BOCES, Auburn, New York (NSBA Direct Affiliate)

"Fuel and energy situation presently is not considered that serious," but district has discussed emergency energy and fuel conservation measures. ("County Schoolmen Deliberate Energy, Fuel Conservation," Auburn, N.Y., Citizen-Advertiser, November 15, 1973)

Corning-Painted Post Area School District, Corning, New York (NSBA Direct Affiliate)

All schools except two depend upon natural gas for heating. Although suppliers have differed in their interpretation of allocation rules, they have "basically agreed" that no more fuel is available, per month, than was delivered last year. Gasoline is also being allocated on the basis of last year's rate.

If the district experiences further cutbacks in gasoline, some extracurricular trips may have to be cut back. ("Schools Feel Energy Crisis, Savona Situation Is Serious," by Bob Rolfe, Corning, N.Y., Leader, November 15, 1973)

Fairport Central School District, Fairport, New York (NSBA Direct Affiliate)

School officials face a 29,000 gallon shortage of gasoline. This is a 16% cut. While the district, through a countywide contract, has been guaranteed the same amount of gasoline it used last year, officials say that "this district has grown so much that that won't be enough."

School board has voted to "temporarily suspend"

- bus transportation for field trips
- buses for spectators at athletic contests
- 4 and 6 p.m. buses for students staying late at school
- renting buses to outside groups

Busing of athletic teams to games and bands to music events will continue. So will buses which shuttle students between schools during the day for special classes. ("Schools Set Busing Curb in Fairport," by Carl Schierhorn, Rochester, N.Y., Times-Union, November 20, 1973)

Fonda-Fultonville Central School District, Fonda, New York (NSBA Direct Affiliate. Information sent 11/27)

These conservation measures are now in effect:

- lower temperatures
- window heaters and individual heaters in lavatories have been turned off
- reduced outside lighting
- alternating lighting in the corridors

Horseheads Central School District, Horseheads, New York (NSBA Direct Affiliate)

All schools are heated by natural gas. Gasoline for buses and other school vehicles is available "theoretically" at the 1972 level.

Vehicle speeds have been reduced to conserve gasoline. In the event of a further shortage, district "might have to cut back on transporting some students it is not legally required to carry." ("Schools Feel Energy Crisis, Savona Situation is Serious," by Bob Rolfe, Corning, N.Y., Leader, November 15, 1973)

City of New York School District, New York, New York (NSBA Direct Affiliate)

Nearly half of the district's school buildings still burn coal, ("How a City Panel Copes with the Energy Crisis," by Glenn Fowler, New York Times, November 23, 1973) and the school system has a year's supply of coal on hand. (New York Times) Oil supplies so far have been "adequate," but are "unpredictable" for the coming months. (New York Times)

The Mayor's Emergency Energy Supply Task Force has halted the conversion of old buildings - "principally schools" - from coal to oil heating plants. ("How a City Panel Copes with the Energy Crisis," by Glenn Fowler, New York Times, November 23, 1973)

District has taken these steps toward conserving energy:

- lower temperatures
- turned off unnecessary lights
- closed sections of buildings which are not in use
- checking and rechecking boilers and other parts of heating systems
- canceling permits for use of school buildings by non-school groups, except in coal-heated structures (New York Times)

Nyack, New York

Superintendent is working on a plan to shift the Easter recess to a colder time period in February. ("Nixon Seeks 15% Cut in Gasoline Output and Reduced Deliveries of Heating Oil," by Robert D. McFadden, New York Times, November 26, 1973)

Oceanside School District, Oceanside, New York (NSBA Direct Affiliate)

District has contracted for oil for the upcoming winter months, but has acknowledged that a severe shortage could reduce the supply sent to its schools.

Fuel conservation measures currently in effect:

- lower temperatures
- windows are being kept closed
- all exterior and classroom doors are being kept shut, except when in use
- nighttime temperatures are being set as soon as students are dismissed

District is formulating contingency plans, should the energy crisis become more severe. ("Schools Target Energy Crisis," Oceanside, N.Y., Island Park Herald, November 14, 1973)

NORTH CAROLINA (information sent 11/28)

State has a sufficient supply of most fuels for most districts. "Five or six" large districts lack sufficient Number 2 fuel oil to last the winter, but "with proper conservation in all districts we can transfer sufficient allocations from other units to meet this situation."

Present supply of gasoline is "adequate for about two months." While there are contracts beyond that, there is no guarantee of delivery. "Also, anti-freeze, tires, oil, etc., are in very short supply. There is no stockpiling of those items."

State Board of Education has held a series of school transportation meetings for superintendents, transportation supervisors, and chief school bus mechanics throughout the state to discuss ways of conserving gasoline and oil. It has also issued a set of recommendations for conserving gasoline to local school districts.

North Carolina State School Boards Association has developed a lengthy list of suggested fuel conservation procedures. It is urging local districts to:

- "immediately initiate" its suggested fuel conservation procedures
- provide opportunity for parents, teachers, and students to discuss and suggest additional procedures
- forward any district plans which have "merit for general application" to NCSBA and the State Board

"As developments occur, some or all of the following may need to be initiated:" altered school day, cancelled night activities, school closing during severe weather, or four-day school week. Some of these measures will require permissive legislation.

Alexander County Schools, North Carolina

Has developed a three-phase energy conservation plan. Phase I would be implemented immediately "as prudent measures for the conservation of fuel;" Phase II, when fuel deliveries are curtailed; and Phase III, if fuel oil deliveries were restricted to such an extent that district's supply faced eminent exhaustion. ("Proposed Measures for the Conservation of Fuel Oil and Electricity in Alexander County Schools.")

Cumberland County Schools, North Carolina

Superintendent has directed principals to implement a lengthy list of fuel conservation suggestions. Maintenance Department is working with principals and staff members "in every way possible", to conserve energy. Fossil fuel consumption is being examined on a weekly basis; natural gas and electricity bills on a monthly basis.

Durham City Schools, Durham, North Carolina (NSBA Direct Affiliate. Information sent 11/26)

Currently, all schools have adequate heating, and busing programs are unaffected. "Apparently, busing will not be affected this winter, but the schools probably will."

District is following the fuel conservation plan furnished to it by the state.

No school board act yet, but "there is talk of curtailing extracurricular activities.

Gaston County Schools, North Carolina

School officials have developed a list of "possible alternatives for fuel conservation" for consideration by the school board. ("Gaston County Schools, Possible Alternatives - Fuel Conservation, For the Board's Consideration")

Shelby City Public Schools, Shelby, North Carolina (NSBA Direct Affiliate)

School board has adopted a list of energy conservation procedures. These include:

- reducing the heating time of school plants
- eliminating evening and weekend use of school buildings by outside groups
- lowering classroom temperatures
- closing all windows, doors, blinds and shades at the end of the day
- encouraging students and teachers to dress warmly
- discouraging special school activities at night
- asking parents, teachers and students to suggest fuel saving procedures

("Bulletin #50, November 15, 1973.")

OHIO (Information sent 11/27)

As of November 9, 21 school districts had reported to the State Department of Education that they had been unable to obtain a commitment for fuel oil. ("Guidelines for the Conservation of Energy in Ohio Schools," State Department of Education, Columbus, Ohio) This is more than a three million gallon shortage. ("Ohio Schools Face Fuel Shortage," EDCOM, November 9, 1973)

State Board of Education issued a resolution November 12 which adopted the Guidelines for the Conservation of Energy in Ohio Schools developed by the State Department of Education, and invoked the State Board's five-fold program for meeting the anticipated crisis:

- continue to process the emergency needs of schools
- distribute the Guidelines
- assist local school management in developing contingency plans associated with the disruption of the school calendar
- develop guidelines for securing buildings in the event of shutdowns during severe weather
- develop suitable instructional materials for teachers and students about the long-range energy crisis

Along with approving the energy conservation guidelines, the State Board passed a resolution proposed by one Board member which calls on the Governor, Congress, and the Nixon Administration to establish the operation of schools as a "first priority recipient of allocation of fuel for the operation of total school facilities." ("Planning for School Energy Conservation," Ohio Schools, November 23, 1973)

State Department of Education has issued its Guidelines for the Conservation of Energy in Ohio Schools. These guidelines are voluntary, since the Department has no statutory authority to mandate the outlined procedures. Briefly, they urge school districts to:

- lower temperature settings
- modify heating plant start-up
- reduce fresh air intake
- consider outside temperatures
- use heating equipment most efficiently
- turn off lights
- modify lighting practices
- use effective maintenance of school buses
- change transportation policies
- change driver education policies

Guidelines also contained preliminary procedures for school closings, stating that more detailed procedures will be forthcoming. ("Guidelines for the Conservation of Energy in Ohio Schools," State Department of Education, Columbus, Ohio.)

State Superintendent of Public Instruction has estimated that total compliance with the State Board adopted guidelines would mean a 30 percent reduction in fuel consumption for the coming winter. ("Planning for School Energy Conservation," Ohio Schools, November 23, 1973)

The Department is working with the Public Utilities Commission of Ohio and the Chicago office of the U. S. Department of the Interior, and is available for assisting local districts with fuel shortages.

Ohio School Boards Association adopted a resolution on November 14 which urged each school district to "do its part" by cooperating with the efforts of state and federal agencies, the State Board of Education, and others; and to follow suggested state and federal guidelines "to the extent these are consistent with the maintenance of a sound educational program within their districts." ("OSBA Energy Crisis Resolution Adopted November 14, 1973")

OREGON (Information sent 11/29)

State has been affected by a potential crisis in the production of electricity since the beginning of the school year, due to a shortage of water last winter which resulted in low reservoirs behind the dams which are the major suppliers of electricity in the state. Although the electrical crisis has eased somewhat, due to early rain and snow, state is now getting into the problem of oil and gasoline shortages.

"Schools will undoubtedly be affected this winter, but we do not yet know the extent." Some districts have received notices from their suppliers that they will have to locate new suppliers when their current contracts expire; one district has been informed of a 25% cut in its heating oil allotment.

Governor last summer ordered a wide range of conservation measures: state car speed limit of 55 miles per hour, state buildings closed at 6 p.m. and cleaned during the day; heat, hot water and air conditioning reduced. The public was asked to voluntarily cooperate. The state achieved a 20 percent savings, but the public failed to respond. Governor later instituted a ban on all outdoor and display lighting, which appears to have had a greater effect upon the general public. ("Oregon Energy Cut Plan Has Chilling Effect - The Governor Has A Cold," by Stevens Roberts, Chicago Tribune, November 19, 1973)

Governor backed down on his proposal to close schools for a one month Christmas vacation, after the proposal met with much opposition. Together with the State Superintendent of Public Instruction, the Governor declared December 3-7 "Energy Crisis Week," with December 7 as "Energy Crisis Day." All schools were urged to plan classroom activities in an "all-out educational effort to convey the gravity of the energy crisis." Principals were sent resource materials prepared by the State Department of Education, including a 59-page booklet, "Energy Crisis: Teaching Resources," which includes a one-day lesson plan in three curricular areas for five age levels.

Oregon School Boards Association has consulted with the State Superintendent of Public Instruction. At this time, the Association does not intend to get involved or to recommend actions to local school districts." Our only involvement would be if some of the proposals seem to us to threaten education or school district operation."

School District #1, Portland Oregon (NSBA Direct Affiliate)

Schools pulled "thousands of power plugs" to save an anticipated 10 percent of electrical energy during the coming school year, in compliance with an emergency appeal from the Governor.

Other steps which have been taken:

- lower thermostats
- turn on lights only when rooms are in use
- maintain heating systems at maximum efficiency

("Portland Schools Respond to Energy Crisis," The School Administrator, October 1973)

PENNSYLVANIA

"Pennsylvania's energy outlook this winter is grim," said a spokesman for Governor Shapp. Nevertheless, problems vary across the state. Many districts heat with coal and natural gas and anticipate few problems this winter.

Houston Independent School District (NSBA Direct Affiliate; information sent 11/27)

"We have experienced no undue hardships relative to the energy crisis." Some plans are in development for conservation, but "we have sufficient energy available as of this date to continue our program in a relatively uninterrupted manner."

VERMONT

"Generally believed that many schools will be forced to close because of the gasoline shortage, rather than the heating fuel shortage. Gasoline will be in greater supply early in the month than late in the month." ("Energy Crisis," Vermont State School Directors Bulletin, December 1973)

State Department of Education has issued a set of suggested energy conservation procedures.

It is "generally accepted" that statewide decisions must be made in the area of sports programs and other divisional and regional programs.

But it is also "generally accepted" that school closures should be a school-by-school, and not a statewide, decision. Governor has promised "major school closure as a last resort." ("Energy Crisis," Vermont State School Directors Bulletin, December 1973)

VIRGINIA (Information sent 11/26)

Schools are currently unaffected by energy cutbacks, but some expect to be affected this winter by shortages of heating fuel and gasoline.

State Superintendent of Public Instruction is developing plans, and has made several suggestions to local school systems.

Virginia School Boards Association has taken no action to date "because there has been no need for such action." It recommends that local school districts follow the lead of the State Department of Education.

Fairfax County Public School District, McLean, Virginia (NSBA Direct Affiliate. Information sent 11/27)

District anticipates a 25 percent reduction in gasoline, and a 15 percent cut in heating fuel.

County Government and County School System have taken the following joint actions:

- reduced use of vehicles, including: cancelling instructional field trips and use of school buses to carry spectators to athletic events
- reduced interior and exterior lighting
- reduced heating levels in County office and school buildings
- advised parents to ensure children dress warmly
- rescheduled school athletic events, where possible, from night to daytime hours
- reduced the speed limit of all county vehicles, except for police, fire and rescue vehicles in emergencies
- encouraged County government and school personnel to form carpools ("Joint News Release, from Robert W. Wilson, County Executive, and S. John Davis, Division Superintendent of Schools, November 16, 1973)

School board endorses the conservation measures in effect. District has established an Immediate Conservation of Energy (I.C.E.) Committee, which includes representatives from all department and employee groups in the system, The County Council of PTAs, Student Advisory Council, County Recreation Department, and County Executive office. A contingency plan is being readied by the Committee at this time.

"Major changes in scheduling may be required this winter, and are under consideration."

Martinsville City School District, Martinsville, Virginia (NSBA Direct Affiliate)

As a result of the reduced allotment to gas companies, schools may have to switch to fuel oil heating on the coldest days of the year "so that other customers of the gas company who do not have alternate fuel supplies can be kept warm." This is not expected to be more than 10-15 days out of the winter, and schools feel they have a sufficient fuel oil supply.

Among the energy conservation measures taken by the district:

- reduced thermostats
- turned off heat in unused portions of the buildings, including gymnasiums
- reduced some interior and exterior lighting ("Schools Hike Lunches, Lower Heat," by Larry Dale Keeling, Martinsville, Virginia, Bulletin, November 13, 1973)

Norfolk City School District, Norfolk, Virginia (NSBA Direct Affiliate)

District has implemented these energy conservation steps:

- reduced thermostats
- reduced vehicle speeds
- encouraged car pools
- improved scheduling of deliveries

Superintendent has expressed to the school board its view that a four day school week or an extended Christmas vacation may not really save energy, would cause problems later in the year, and may not be educationally sound. ("No School Cutback By Fuel Shortage," by Gary Dalton, Norfolk, Va., Virginian Pilot, November 16, 1973)

WASHINGTON

State Superintendent of Public Instruction last July suggested the following:

- reduce field trips by 25 to 50 percent
- eliminate bus stops which were not one-half mile apart
- eliminate all weekend ski bus runs, some primary and kindergarten runs, and all out-of-state trips ("Schools Face Fuel Shortage," by Betsy Trainor, Walla Walla, Wash., Evening Union-Bulletin, November 16, 1973)

Seattle Public Schools, Seattle, Washington (NSBA Direct Affiliate. Information sent 11/27)

Uncertainty about possible cutbacks in busing services after the first of the year. (Busing services are contracted with two carriers.)

Since early summer the district has been engaged in efforts to reduce the consumption of electrical energy and other resources. The original goal of a 10 percent or greater reduction in utilities use has been reestablished at 20 percent, since, through September, the district achieved a 10 percent reduction in the use of electricity; an 11 percent reduction in water consumption; and a 15 percent reduction in the use of gasoline.

The district Committee for Conservation of Energy Resources is focusing its efforts upon:

- reducing utilities use
- providing educational programs in conservation
- cooperating with community-wide efforts to inform the public and implement conservation efforts

School Board supports the present administrative efforts, but no Board action is anticipated unless major changes in district policy become issues.

Walla Walla School District #140, Walla Walla, Washington (NSBA Direct Affiliate)

Lack of gasoline for school buses "may be a problem" in the near future. District is bracing itself for a possible gasoline shortage. Fuel used by the district is purchased this year on the contracts between the county government and a gasoline company. Previously, the supply was assured until January 1974. District has since been assured the schools will be able to make purchases on the county contracts after the first of the year.

25-263 O - 74 - 14

Bus runs have been consolidated this year to the point that "not one more student could fit on our buses." Administrators have set priorities on field trips and extracurricular activities that require school transportation.

Committees established in each of the schools to recommend savings on electricity have been followed by similar committees to recommend savings on fuel. ("Schools Face Fuel Shortage," by Betsy Trainor, Walla Walla, Wash., Evening Union-Bulletin, November 16, 1973)

WEST VIRGINIA (Telephone interview 11/29)

The Governor of West Virginia expects no major problems or energy restrictions, since West Virginia is a major coal producing state.

The West Virginia School Boards Association is cooperating with the Governor's office, the state department of education, and other education groups in energy conservation measures.

WISCONSIN (Information sent 11/26)

State anticipates a 15 to 20 percent shortage of fuel oil. ("Wisconsin Fuel Oil Shortage is Severe," Chicago Tribune, December 1, 1973)

Suppliers are not entering bids, but are providing fuel equal to 1972-73 and on a current market price basis. "We are not aware of any school that has had to shut down, but we have had schools that have been very close."

Wisconsin Association of School Boards, Inc., along with the Department of Public Instruction, has been working closely with the state Emergency Energy Assistance Commissioner. WASB has recommended to local districts that they issue directives on conserving energy, and to keep extensive records of their energy conservation efforts. In Wisconsin, schools in emergency need of fuel will have higher priorities if they have a record of cooperation. The Association hopes to issue further detailed recommendations in cooperation with the Department of Public Instruction.

State Energy Commissioner has given schools "one of the highest priorities, and says, in fact, schools may be used as emergency housing in critical situations." As of November 23, schools ranked 11th on a list of 12 priority groups for the use of petroleum products.

WYOMING

Washakie County, School District No. 1, Worland, Wyoming (NSBA Direct Affiliate, Information sent 11/26)

The major problem to date is gasoline. "Our shortest activity trip is 30 miles, our average is 150 miles one way, and this definitely creates a fuel problem for returning vehicles."

Fuel conservation actions include:

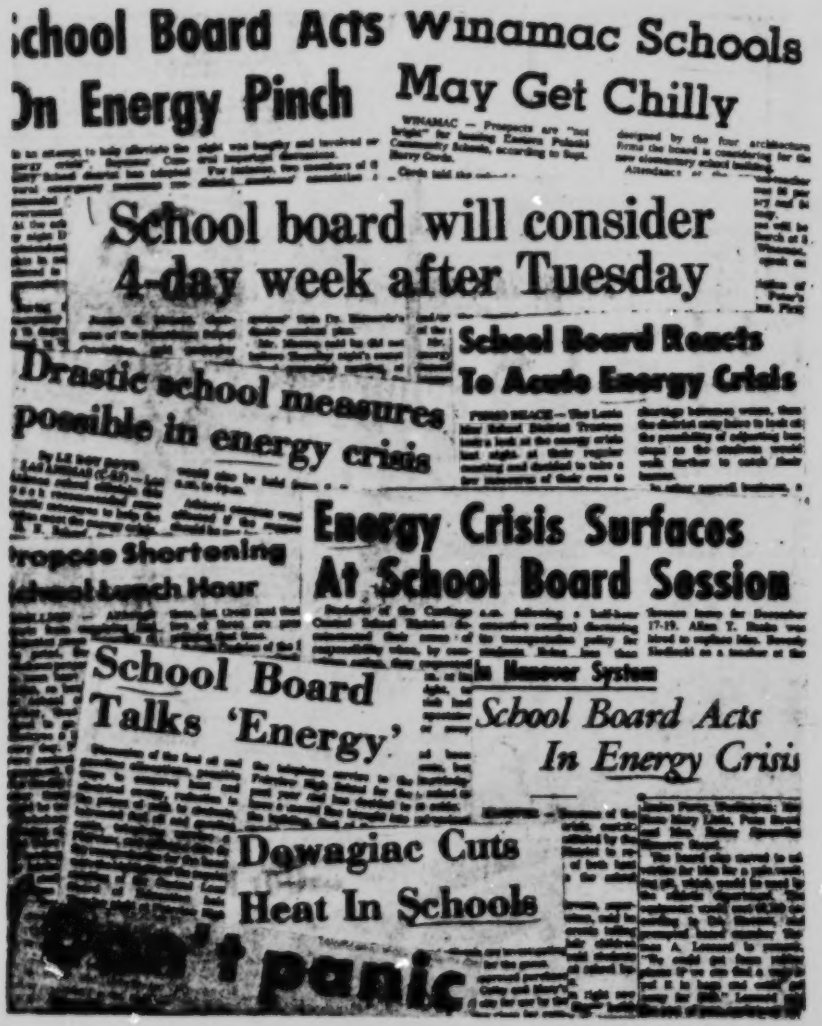
- limiting school buses to 50 miles per hour
- lowering thermostats from 78° to 72°

Sources of the newspaper headlines pictured on the front cover of this report, from left to right:

Ludowici, Ga., News 11/13
Morganton, N.C., News Herald 11/15
Plattsmouth, Neb., Journal 11/15
Peoria, Ill., Morning Journal Star 11/20

Sources of the newspaper headlines pictured on the back cover of this report, from left to right:

Seymour, Iowa, Herald 11/15
Lafayette, Ind., Journal & Courier 11/20
Providence, R.I., Journal-Bulletin 11/17
Pueblo, Colo., Star-Journal 11/15
Arroyo Grande, Calif., Times-Press-Recorder 11/14
Manitowoc, Wisc., Herald-Times 11/21
Carthage, N.Y., Republican Tribune 11/15
Defiance, Ohio, Crescent-News 11/21
York, Pa., Dispatch 11/19
Somerset, Mass., Spectator 11/8
St. Joseph, Mich., Herald-Press 11/20



School Board Acts
On Energy Pinch

Winamac Schools
May Get Chilly

School board will consider
4-day week after Tuesday

School Board Reacts
To Acute Energy Crisis

Drastic school measures
possible in energy crisis

Propose Shortening
School Lunch Hour

Energy Crisis Surfaces
At School Board Session

School Board
Talks 'Energy'

In Hanover System

School Board Acts
In Energy Crisis

Dowagiac Cuts
Heat In Schools

t panic

Senator PELL. Actually, there is no reason in the world why schools should not change their times. Daylight saving time does not mean the schools necessarily have to go with them. They can move forward an hour if it is more convenient.

Mr. WEBB. Except, as I pointed out, the other operations in our society, the working hours for parents with the new time change.

Senator PELL. Most parents have gone to work before the children go to school in any case, and there is no reason why the local school boards should not change the time of the school.

Mr. WEBB. We have found that this has been a point of considerable discussion in the school board meetings. Some of them have moved to set their opening time back an hour. Some have even compromised on going to a half hour change.

Senator PELL. I am curious.

Were any of you consulted by the administration in connection with energy problems, not necessarily by the Office of Energy, whatever it is, but by HEW in this matter?

Dr. WISE. Senator Pell, if I might answer that to some degree, we are very concerned about this, and we have had consultation with HEW inasmuch as we have given them our concerns and we have tried to work with them.

As far as any real input and as far as any consultation with the Energy Office, we have had none.

Senator PELL. On the other hand, HEW basically is your advocate.

Dr. WISE. We have brought our concerns to them. We have tried to do that to the other branches and have not been able to do so.

APPOINTMENT ARRANGED

Senator JAVITS. Would you yield?

I have just called Mr. Sawhill, deputy to Mr. Simon, and they would be very glad to meet with you. And if you would be good enough to let us——

Dr. WISE. We would be very happy to meet.

We have been trying since August to get this established.

Senator JAVITS. All you have to do is appear here and it is done.

Senator SCHWEIKER. At least, this hearing energized the Energy Office.

Senator PELL. Senator Javits.

Senator JAVITS. I have no questions.

I just arranged this, Mrs. Wise. You are certainly right, and we will do it right away.

I was very interested in the tradeoffs that you gentlemen and Mrs. Wise have indicated, that this is not a simplistic proposition, by closing your school you do not necessarily save overall energy. You might waste it.

I deeply believe that that is one of the things you ought to advise the Energy Office on so that we do not proceed in these things in some elementary way which could be very foolhardy.

I like very much what you all said on that, and you should guide it.

Mr. SALMON. Earlier in the testimony, I believe, when Dr. Ottina was testifying, someone raised the question about whether there would be a social cost attached to having students at home.

I would like to cite for the information of the committee a study that was done in Sacramento, Calif., when I was superintendent in that district, in which we joined with the local police department in enforcing the compulsory attendance laws very intensely in certain areas of the district. In doing that, we were able to reduce the daylight crime, which was essentially a crime against property, by 45 percent.

I think it is significant that when you have young people at home, without structured programs for them to engage in, but they may find—some of them may find socially destructive ways to engage their time.

Senator JAVITS. Also, what you said about the priority be given to education, it is true, but I think our people in the Congress wish for priority given to employment.

There are lots of priorities which, immediately after the top priority, and certainly education should figure very, very high—therefore, again this is a point which I hope you will register effectively with the authority.

Mr. BENTON. Could I react to that? If you closed down the schools, you are not just closing down schools for elementary and secondary youngsters, but you are closing down for a number of adult users.

In the State of Iowa, we have a population under 2 million. Last year, we had 240,000 adults in our continuing adult education program in our community colleges.

As you take a look at employment issues, there is no question that there is going to be some changes in employment as a result of the energy crisis. You certainly do not want to dismantle that agency in our society that can contribute the most to retraining the adult population.

Senator JAVITS. I am the author of the adult education bill. Believe me, I am with you on that one.

Senator PELL. Senator Schweiker.

Senator SCHWEIKER. Thank you, Mr. Chairman.

I think all of you have made very good practical points about how some sacrifices can be made without curtailing your basic educational responsibilities. I certainly concur also with the rest of your testimony that up till now, in terms of what has come out of the Energy Office, education has been too low a priority.

You can certainly count on this committee and all of us to make sure that education will be given the priority this committee feels it deserves.

I think the other point that impresses me is that you said the one thing you do not want to sacrifice in your cutbacks is what you variously described as educational momentum. Interrupting the momentum of a child's learning is far more serious than some of the other small things you can do that probably would save as much energy and yet not disrupt this educational momentum.

I think that is a very good point and one that I would think the Energy Office would not think of right off.

I think the meeting that Senator Javits has helped energize here is a good one.

I think that this committee can see that the goal is a very good one, both reasonable and realistic.

I do not have any more questions, but I think it has been very helpful to have this testimony, Mr. Chairman.

Senator PELL. Thank you.

Mr. SALMON. There is one additional item that I think the committee needs to concern itself with.

Dr. Webb and I were talking before we testified, and he identified a problem that I think is of great importance, that is that although the schools have been allocated gasoline for transportation, many times when they seek bids for that gasoline, no one bids. That was the reason that in my testimony I suggested that schools be guaranteed the amount allocated because, if I understand the allocation of gasoline properly, it is going down a certain hierarchy, and the service station at the end gets what is left.

However, if some distributor decided it was more advantageous profitwise to not bid on a school allocation so that it could be transferred to another different level, it seems to me significant that schools be guaranteed whatever their allocation might be.

Mr. WEBB. Further on that, a detail in my full statement, not only do we have this in regard to pricing, but many school districts are finding that they cannot get a bid period from a supplier to furnish fuel to the school systems. And this is very serious.

It has a tremendous impact on the budgets.

Senator PELL. I am aware of this. This is true all over the country, as you point out.

I thank you all very much indeed.

Our next Panel on Higher Education consists of Stephen K. Bailey, vice president, American Council on Education; and Layton Olson, legislative director, National Student Lobby.

Dr. Bailey, thank you very much for being here, and welcome to this subcommittee.

STATEMENT OF STEPHEN K. BAILEY, VICE PRESIDENT, AMERICAN COUNCIL ON EDUCATION, AND LAYTON OLSON, LEGISLATIVE DIRECTOR, NATIONAL STUDENT LOBBY, A PANEL ON HIGHER EDUCATION

Mr. BAILEY. Senator Pell, thank you very much, and members of the committee.

I am Stephen K. Bailey, vice president of the American Council on Education.

It is an honor to be able to make my first congressional appearance in my new role before this distinguished subcommittee. Your demonstrated sensitivity to the needs of American postsecondary education, and especially to the problems of needy students, has been exemplary.

As you are well aware, the American Council's own posture on educational priorities has been informed and in part shaped by this subcommittee's, and especially, Mr. Chairman, by your dedication to the inseparable causes of equality and quality in American colleges, universities, and postsecondary schools and institutes.

I will not take the time to read the statement, Mr. Chairman.

Senator PELL. The full statement will be printed in the record at the conclusion of your testimony.

Mr. BAILEY. Mr. Chairman, there are only two or three points that I wish to make.

One is that there is no generalization that can easily be made about postsecondary education and the energy crisis.

There are some laboratories that need to have constant steady temperatures. There are other places where obviously, higher education can and will lower thermostats.

I think one of the main points to be made—and I try to spell this out in the testimony—is that there are certain categories of students, notably part-time students, and particularly women, who might be hurt very severely if adult education opportunities, extension courses and whatnot are cut back as a result of energy allocations.

We hope that when the questions of allocation arise—if we ever come to rationing—that this danger will be borne in mind.

The main problem which I think we must emphasize for you and your subcommittee is that the energy crisis is not a short-range problem. In the long haul, we, sir, are genuinely frightened by what we see.

In our small building, the fuel costs are running 31 percent above the 1973 level.

Senator PELL. It may be a small building, but from the amount of paper generated from it, I think it is larger than the Empire State Building.

Mr. BAILEY. From recent statistics, we may expect any additional 35 to 40 percent increase.

Using that as a measure, we look at the problem of a complex university, like New York University, for example, whose fuel consumption tallies more than $1 million a year.

As you know, New York University is typical of many institutions that have been in severe financial distress, running annual deficits of many millions of dollars. By Herculean efforts, NYU has cut every conceivable budget to the bone, including closing of the engineering college, and the sale by NYU of one entire campus.

What these increased costs of power are going to do to the economic state of postsecondary education, frankly, is hard to imagine.

To be sure, these costs are going to affect our entire economy and the energy that supports it. Most of these cost increases in the general economy can, however painfully, be passed on to the consumer.

However, with tuition, which many institutions must charge, already sky high and in danger of pricing higher education out of the market for an increasing number of students, we do not see price increases as a viable solution.

A corollary concern is that the other chief source of revenue, at least for private institutions, namely private philanthropy and income from endowments, are equally threatened. And I need not emphasize to you the importance of what has happened as far as gifts of appreciated securities are concerned. I can only say that our best estimate is that the decline in the economy will mean a very substantial decrease in support from private sources for higher education.

The equilibrium between income and expense is a fragile one.

Looking ahead, the Congress and our State legislators may well have to examine possible solutions to postsecondary education's financial crisis that go far beyond any public policy yet conceived.

The time may be hear at hand when some substantial additional public underwriting of both private and public postsecondary edu-

cation in America—similar to arrangements that exist in every other advanced industrial nation in the world—may have to be put into effect. The American Council is already at work on responsible designs for such a major shift in public policy.

As we move forward, and as congressional hearings begin in advance of the educational amendments bill of 1975, we will need, Mr. Chairman, the continuing concern and support of this committee.

My final point is that if there are needs that higher education has, there are also contributions which higher education can make to the energy crisis. The basic point here is that when one looks at the energy problem in the context of the decade ahead and in the context of all the interrelated problems, world population, food supply, and environmental quality, for example, solutions, or approaches to solutions, cannot be produced without trained intelligence, by scientific advances, and by technological innovation.

Our national capacity in these areas rests on the sustained excellence of the Nation's universities.

Recall how the World War II research and development effort and the space program were manned? They drew on the product of universities over the 30 years preceding the crises. The same will be true of the unforeseen and unforeseeable difficulties that we will encounter over the next 10, 50 or 100 years.

We are still learning what a famous philosopher saw with profound insight: "Any nation which does not value trained intelligence is doomed."

The lesson that we should have learned by now is that in support of students, of research, and of the universities themselves, we must keep a steady course. Sharp and sudden cuts in support in these areas in response to transient forces impair the capacity of the system to meet long-range needs.

The same is true of sudden large increases directed to highly specialized ends.

So, our plea is for stability and flexibility in support, not for the sake of the students, the faculty or the universities, but for the sake of the country.

Again, I am grateful for your interest and for your attention.

Senator PELL. Thank you, Dr. Bailey.

[The prepared statement of Mr. Bailey follows:]

Statement

of

Stephen K. Bailey, vice president, American Council on Education

Before The

Subcommittee on Education

Committee on Labor and Public Welfare

United States Senate

January 7, 1974

Mr. Chairman and members of the subcommittee:

I am Stephen K. Bailey, vice president of the American Council on Education. It is an honor to be able to make my first congressional appearance in my new role before this distinguished subcommittee. Your demonstrated sensitivity to the needs of American postsecondary education, and especially to the problems of needy students, has been exemplary. As you are well aware, the American Council's own posture on educational priorities has been informed and in part shaped by this subcommittee's (and, especially, Mr. Chairman, by your) dedication to the inseparable causes of equality and quality in American colleges, universities, and postsecondary schools and institutes. Your immediate interest in the current and prospective impact of the energy crisis upon all of postsecondary education is simply another example of your continuing sensitivity and deep concern. On behalf of the American Council on Education I wish to express my heartfelt thanks.

We have been trying at ACE to keep abreast of the energy developments as they unfold from day to day and to communicate with our members in two different ways. Up to the present time, most of the decision-making about energy policy has centered in Washington, and we are trying to convey those decisions to the field as rapidly as possible. If and when more responsibility is shifted to the states and regions, our task of serving as a communications agent is going to be substantially more complex. Our second task has been to keep our members informed about what other institutions are doing to meet emergencies in the hope that a bright idea developed on one campus may be useful to others.

I should like to make several observations that may be useful to you and your colleagues in the Congress. During an earlier period of great uncertainty--the days immediately after the President announced Phase I of Wage-Price controls--we urged upon the Government the need to recognize postsecondary education as a quite unique enterprise, with problems very different from those encountered by other sectors of our economy. I am happy to say that this proposition was recognized quickly by those in authority. Higher education--both public and private--was treated as a distinct entity, and solutions were reached that I believe met the needs of both the Government and our institutions.

As the dimensions of the energy crisis were revealed, it was our first inclination to suggest an analogous approach and to urge that once again we be treated as an enterprise separate and apart from other sectors. In no way do I imply that we believe we should be accorded special priorities. We recognized from the start that first concern should be accorded to the minimum essentials--food, shelter, health, and above all the nation's production capacity in a robust economy that must provide jobs. All we sought, and all we will seek, is proper recognition of the importance of postsecondary education in any alignment of priorities--below the list I have suggested, but above other activities that could be classified as nonessential.

The nation has learned a lot these last few weeks about the interrelatedness of our economy. There is almost a Marie Antoinette "let-em-eat-cake" quality about some of our paradoxes that see, for example, oil rigs shut down for lack of fuel to run them. We at ACE have also learned a lot that should have been obvious about the complexity and extraordinary diversity of our system of higher education. We have come to the conclusion that in this energy situation, unlike the economic controls situation, it would make

almost no sense to treat postsecondary education as an entity. The problems differ from region to region, from state to state, and from institution to institution, and they defy generalization.

We think we can at best sort the problems into two broad categories--the immediate ones that call for ad hoc solutions, and the long-term ones that are far more serious in their implications. Let me illustrate both.

In the short run, if institutions can get a fairly precise fix on the amount of energy they are to be allocated, they can in many instances adjust their operations accordingly. Thus, we see many institutions adjusting their weekly schedules by concentrating classes during daylight hours and shutting down the academic plant over weekends. But these seemingly obvious and easy solutions raise problems of their own. Most students are totally dependent on summer jobs to help meet the costs of their education. That puts a distinct limit on the ability of institutions to adjust their calendars. The elimination of night and weekend classes would almost destroy opportunities for part-time students, who number in the millions, and in fact they now outnumber full-time students, and whose needs both you in the Congress and we in academia have increasingly recognized. Women, particularly, could be hurt by any substantial reduction in part-time educational opportunity.

Let me suggest another problem that defies generalization. A very large percentage, probably well over half, of all students in postsecondary education commute to school. In large urban centers with good public transportation the energy shortage is creating difficulties, but they are not insurmountable. Students can ride buses and form car pools, leaving institutions to ponder how to pay off their bonded indebtedness on half-empty

parking lots. (I am not being facetious; this is a serious concern.) But we have prided ourselves, and properly, at the development of a large network of community colleges that have brought postsecondary education within reach, economically and physically, of most of our population. Many of these are in rural areas with little or no public transportation, and they serve a population scattered around the institution up to a radius of 50 or 75 miles. If we come to gasoline rationing, we must take a hard look at giving priority status to students in this latter group, even though it would make no sense to give such priority to all commuting students simply because they commute.

What I have just said applies equally to extension students. The associate dean of the University of California Extension has written us:

> "Our extension division serves a huge geographical area, much of it of low population density, so our enrollees are quite dependent on gasoline. Also, our instructional staff travel considerable distances at times in order to take the courses to where the people are located. Naturally, we are vitally interested in seeing that federal and state regulations regarding gasoline consumption make provision for extension students, most of whom drive to class over greater distance areas than the "usual" student. For many of our enrollees our courses are important for them as professionals and in some cases provide salary and promotional incentives. This extension division processes 20,000 individual enrollments."

As I indicated earlier and for reasons I have tried to illustrate, we do not believe it is possible to generalize about the problems and needs of

postsecondary education. It follows logically that while certain basic guidelines must come out of Washington, the appeals process within those basic guidelines must be delegated to the states and perhaps even to smaller units of Government. A university whose basic source of energy is coal is in a far different situation from one which must rely on Number Six oil with a back-up of interruptable natural gas which will no longer be available. The largest consumer of energy on the Princeton campus is the plasma physics laboratory, the chief purpose of which is to conduct research in the development of new sources of energy. Perhaps the Atomic Energy Commission can take care of that one, but a great deal of research less dramatic but important to future national needs is being conducted in universities. Some require constant temperatures; conceivably an interruption of two weeks occasioned by a campus shutdown could destroy a year's investment of time and money. Or again, such an interruption might make it impossible to fulfill a contract with the Government or other sponsoring agencies.

The whole point of this recital is to suggest that postsecondary education is as complex as the society it serves, and there is no pat way of lumping it all together and solving its problems. What we hope is that as new problems are identified, there will be a map available that can show us the route to take and the center to reach to discuss a solution. Secretary Weinberger has designated an individual at HEW with whom we have been working, and while it is a bit early to tell, we believe this is going to be mutually helpful. We have been seeking, for example, a ruling from the Office of Petroleum Allocation that would make additional fuel available in subsequent months for institutions that shut down for an extended period of time in January. We have not yet had a response, but we believe HEW is supportive of what seems to us a sensible proposal. We have also found the Veterans Administration entirely cooperative in altering its regulations so that veterans will not

lose their benefits or have them interrupted when an institution extends the Christmas break beyond thirty days. All this gives us hope that in the short run, on a case-by-case basis, solutions can be found and mutually agreed on.

For the long haul, we are genuinely frightened at what we see. In our small building that houses many higher education associations, fuel costs are running 41 percent above the January 1, 1973 level. The recently published allocation regulations indicate that we may expect an additional 35-40 percent increase. Using that as a measure, we look at the problem of a complex university like New York University whose fuel consumption tallies more than $1 million per year. As you know, NYU is typical of many institutions that have been in severe financial distress, running annual deficits of many millions of dollars. By herculean efforts that cut every conceivable budget to the bone, and even included the closing of the engineering college and the sale to New York State of one entire campus, President Hester could announce this fall that he could see light at the end of the tunnel. What the increased costs of power and related needs are going to do to the economic state of postsecondary education is hard to imagine. To be sure, these costs are going to affect our entire economy and the industry that supports it. But most of these cost increases in the general economy can, however painfully, be passed on to the consumer. However, with tuition that many institutions must charge already sky high, and in danger of pricing higher education out of the market for increasing numbers of students, we do not see price increases as a viable solution.

27-365 O - 74 - 15

A corollary concern is that the other chief sources of revenue, at least for private institutions, namely private philanthropy and income from endowment are equally threatened. Our studies show that the enormous preponderance of voluntary support of higher education from individuals comes in the form of gifts of $5,000 or more in the form of appreciated securities, most of them made in December. One look at the market suggests that 1973 is going to be a very lean year. An extension of that market into future years could spell economic disaster. I know that there are some who feel that in the past we have cried wolf over the parlous state of higher education finance. There was a mild sense of euphoria as many institutions pulled themselves from the brink of bankruptcy and achieved balanced or near-balanced budgets. But whatever equilibrium between income and expense has been achieved is a fragile one. It appears to us that the energy crisis may shatter it.

Looking ahead, the Congress and our State legislatures may well have to examine possible solutions to postsecondary education's financial crisis that go far beyond any public policy yet conceived. The time may be near at hand when some substantial additional public underwriting of both public and private postsecondary education in America--similar to arrangements that exist in every other advanced industrial nation in the world--may have to be put into effect. The American Council is already at work on responsible designs for such a major shift in public policy. As we move forward, and as Congressional hearings begin in advance of the Educational Amendments bill of 1975, we will need, Mr. Chairman, the continuing concern and support of this committee.

Now in conclusion, let me shift from the needs of higher education to what higher education can contribute. The basic point here is that when one looks at the energy problem in the context of the decade ahead and in the context of all of the interrelated problems -- world population, food supply, and environmental quality, for example -- solutions, or approaches to solutions, can not be produced without trained intelligence, by scientific advances and by technological innovation. Our national capacity in these areas rests on the sustained excellence of the nation's universities. Recall how the World War II research and development effort and the space program were manned. They drew on the product of universities over the 30 years preceding the crises. The same will be true of the energy crisis. The same will be true of the unforeseen and unforeseeable difficulties that we will encounter over the next 10, 50 or 100 years. We are still learning what a famous philosopher saw with profound insight: "Any nation which does not value trained intelligence is doomed." The lesson that we should have learned by now is that in support of students, of research and of the universities themselves we must keep a steady course. Sharp and sudden cuts in support in these areas in response to transient forces impair the capacity of the system to meet long range needs. The same is true of sudden large increases directed to highly specialized ends. So our plea is for stability and flexibility in support, not for the sake of the students, the faculty or the universities, but for the sake of the country.

Again, I am grateful for your interest and your attention.

Senator PELL. The next witness is Mr. Olson.

Mr. OLSON. I am Layton Olson, legislative director, National Student Lobby, which represents approximately 300 campuses around the country.

I would like to make two points on how the energy crisis affects students on campus, those things that affect student jobs and costs based on commuting.

The first effect that I think is here now, and in the future, is what is happening to student jobs as the economy buckles back, and particularly how that affects jobs around campuses.

In particular, I think there is going to be some great need for support of work-study program funding, which needs to go up.

Work-study funding has been sitting at about the same level over the last couple of years. That has been eroded pretty badly by inflation.

There are other instances where the economy is cutting part-time jobs, such as in the Postal Service.

I think this job situation is also very closely related to scheduling problems, whether students are able to get summer jobs, and whether students will be able to schedule at all during the school year so they can schedule their jobs.

I think that jobs is the biggest thing.

Second to that is the cost of commuting. What we say in the National Student Lobby, and particularly when we got the results back from our survey of campuses around the country, which we got back from about 100 colleges during December, was that the effect of the price increase at 20 or 30 cents in gasoline per gallon affects the students two or three times as hard as it does the regular commuter, because the income of the students is anywhere from between $1,500 and $3,000 a year.

The commuter's income is substantially higher.

I think the priority of going to school should be similar to that of going to a job. That means that there needs to be some taking into account the fact that a person who is commuting to American University is going to be hit a lot harder than a person who is commuting downtown, that is also in relation to some of the questions about parking taxes.

I think that those are two things that hit students right in their pocketbooks. I think students are willing, just like every other section of society, to try to comprehend just what is happening and is going to happen.

I think one of the things that has happened on campus that really needs to be expanded on around the country is something like that which happened in the 1960's, the teach-in.

Everybody needs to know what is going on.

I think some of the things that will begin to surface is that it is not just a question of the supply and the question of cutting back 10 or 20 percent. The big thing is setting there right now which nobody will quite look at is what is going to happen with the balance of payments.

We are facing a restructuring of the entire financial system of the country if we do not take leadership right now. I think that is the

clear implication of every student symposium or teach-in around the country.

I think students are willing to make contributions to energy conservation as well as everyone else.

The last thing relates to the question of participation by students and every other element in the planning of energy policy.

There has been a program put forward to put a $1½ billion in energy research and development.

I have looked at the names of all the people contributing to the proposed program, and the names are of people who are trying to produce things and who do not have a very good concept, or do not really deal with financial questions, or with the psychology of this country which has been very, very highly consumptive oriented.

I would like to close on that point.

Senator PELL. Thank you very much indeed.

I want to congratulate you, and thank you too, on the lobbying job for basic grants about a year or 2 ago.

Mr. OLSON. We will continue to work with appropriations every year.

Senator PELL. I hope you can continue to make them fulfill the expectations we have.

I think when it comes to commuting and to transportation in the schools, you are absolutely right in regard to commuting to schools, junior colleges, nonresidential colleges, and this is going to be a very real fact in the student's cost of attendance.

On the other hand, there are some residential colleges where I would think the use of automobiles could be sharply restricted.

I know I went to one where we were prohibited from having automobiles for all 4 years that we were there, and we managed to survive very handily, depending on the railroad and the bus services.

This is an approach purely for residential colleges.

Mr. OLSON. I think most students would agree with that, that that could be helpful.

Senator PELL. Going to Dr. Bailey for a second, I was struck by the fact that you were pointing out that there had to be a broad look at the whole picture. You could not separate any elements out, not only the national picture, but it is almost an international picture.

What we really have is a four-legged stool with energy, food, population and the oceans, all of these interacting into each other.

What one nation does with regard to the production of food affects the population in another, and so on.

Mr. BAILEY. Knowing your interest and Senator Javits' interest in the field of international education, you may be interested in knowing that one of the things the American council is presently doing is conducting in cooperation with the Department of State task forces made up of both academic and Government officials. One of these task forces is looking at the possibility of transnational, collaborative research on the kinds of problems we are talking about here this morning: matters like energy and the environment. We hope, out of our task force activities, will come a series of reports useful to national policymakers.

Senator PELL. I am glad, because it is fantastic, with the way technology has been broken down, the world is still a completely compartmentalized world, based on national frontiers.

Senator Javits.

Senator JAVITS. Mr. Chairman, I appreciate very much what is being said here, and I would only suggest that if there is still any need in this field from elementary and secondary education to meet with the energy authorities, and if there is any problem about it, I hope you will let the chairman or myself know.

Mr. BAILEY. Senator Javits, I appreciate that very much.

Senator JAVITS. We do not want to be volunteers or thrust any meetings on you or on them.

If there is a problem of communication, let the chairman know or let me know.

Senator PELL. I would add that the ranking minority member has better communication, I think, on this matter than the chairman.

The final witness is Dr. Ann Scott.

STATEMENT OF DR. ANN SCOTT, VICE PRESIDENT FOR LEGISLATION, NATIONAL ORGANIZATION FOR WOMEN

Dr. SCOTT. Senator Pell, I will summarize very briefly.

Senator PELL. I thank you very much indeed, your statement will be included in the record at the conclusion of your testimony.

Dr. SCOTT. I will read only my recommendations and implications I made from my testimony.

I represent the National Organization for Women. Our concern with the effect of the energy crisis on women and girls in the education industry includes a number of areas:

One, the effect gasoline rationing could have on women as both teachers and learners, particularly those who are part time.

Two, the effect possible school closings could have on working women.

Three, the participation of feminists in local, State, and National energy planning bodies.

In the area of higher education, concerning possible gasoline shortages, it has been our experience, and as the table appended to my testimony will show, that the incidence of women as consumers of higher educational part time services is growing disproportionately compared to that of men. Part time services are the ones which generally require commuting.

We are very concerned that gasoline rationing or possible gasoline price increases not be allowed to disproportionately affect women particularly those who are attempting to come back into the education world and to increase their employment chances for later in life.

Another concern that we have is that women who are employed in the higher education world not be disproportionately affected. I used to work at the State University of New York at Buffalo, where I was on the faculty. Many faculty wives who were barred by employment rules taught in night schools, satellite campuses, and adult education, which are more peripheral forms of employment in educational world than full-time faculty.

If there are school closings, or if there are curtailments of educational services, I hope very sincerely that the universities will be admonished to make certain that those curtailments do not disproportionately affect these women.

Another concern that has not been expressed this morning, but that I feel is one that I certainly should express, is that there be no curtailment of lighting in the evening on campuses, in areas which could increase the chances of rape—a crime which is increasing on campuses, and in urban areas, and against women who venture down to night school in urban areas.

Now, getting back to possible school closings, I will not read my grumpy arguments about what happened in the State of Maryland, but I would like to point out, as has been mentioned this morning, that the possible effect of school closings could mean a particular hardship on women.

According to the Bureau of Labor statistics the number of mothers in the United States with children from the ages of 6 to 17—public school age—was 14,538,000 in March 1969, of whom 50.7 percent worked—over half.

It is my feeling that when groups of men planning to cope with fuel shortages decide to close the public schools or shorten their hours, they are acting on the assumption that every child in school has a mother at home in a ruffled apron, dispensing cookies and milk. The statistics prove them wrong.

There are other concerns, too, for women who work. Schools are intended primarily to educate children. However, they also inadvertently serve as child care facilities. Considering calendar adjustments, we must take into account not only the impact on education, but also child care aspects of the schools.

Finally, I would like to get to the point of the participation of feminists in local, State, and national energy planning bodies.

I do want to make the point here that because of the possible impacts on women I have described, NOW feels it is vital that persons concerned with women's issues be represented on Government energy planning bodies at all levels of Government. This does not mean simply appointing women to the planning bodies, because women who are appointed may not have these concerns in their minds, whereas men may.

We urge that appoints made of persons, women or men, concerned with the status of women and the adverse affects the energy crisis could have on women.

Women are over half the population, the sole or major support of 9 million families, 40 percent of the labor force, over half of every minority, most of those in poverty, and those most in poverty in this country. It is vital that their concerns be represented to the Government in planning for energy shortages.

Finally, I should like to get to the recommendations on page 6 of my testimony.

I have some additions to make to that.

In the event of public school calendar adjustments, we hope a shortened school week would include also a shortened work week. Schools should not be forced to bear more of the burden than other sectors of the population.

If the shortened school week is approved, then employers who do not operate on a shortened work week should be strongly encouraged, perhaps required, to provide child care facilities, or arrangements for their working parents.

Third, if schools are required to close down for a period of time, then certain schools should remain open and serve as child care centers. This could be accompanied by appeals to employers to arrange child care so that a minimum number of schools would need to be used.

Assuming that the full time employees of the school system would continue to be paid, they could be used to staff these centers. Twelve month employees, such as psychologists, do not get school holidays, and would be available for staffing.

Also, as needed, teachers could be assigned on some equitable basis.

I would like to add to this a thought that came out of the testimony I heard this morning. When schools are opened, there should be supervision of school playgrounds earlier in the morning, so that parents who choose to can take public transportation, which may require their leaving home earlier, in preference to driving.

Four, in the event that temporary child care centers must be set up, the regulations governing such centers might need to be relaxed during the period of crisis.

Five, in any calendar adjustment, part-time workers paid by the hour lose pay. These workers are cafeteria workers (most, if not all, women) and bus drivers (predominantly women and blacks). Anyone who takes such jobs at such low pay must be desperately in need of money. Women are particularly attracted to these jobs because the hours coincide with the hours their children are in school. NOW strongly suggests that these people be paid on days when schools have unscheduled closings.

Further, all school systems in elementary and secondary, as well as higher education, should, as part of their affirmative action requirements not to discriminate, keep statistical track by sex and race of all persons whose jobs are affected by curtailment of services through cancellation of classes, layoff, or furlough, or any other services connected with the education industry.

Finally, those concerned with the energy crisis as it affects women should be consulted and represented on all Government bodies planning for the energy crisis. This includes the Federal Energy Office and HEW. I assume other women's groups would like to avail themselves of the offer that was made to the NEA and the American Council on Education, to meet with the Federal Energy Office to bring these questions to their attention.

[The prepared statement of Dr. Scott follows:]

LEGISLATIVE OFFICE
1107 National Press Building
Washington, DC 20004
(202) 347-2279

National Organization for Women

STATEMENT OF
THE NATIONAL ORGANIZATION FOR WOMEN
ON THE EFFECT OF THE ENERGY CRISIS ON
WOMEN AND GIRLS
IN THE EDUCATION INDUSTRY
SUBMITTED BY ANN SCOTT
VICE PRESIDENT, LEGISLATION
TO THE SENATE EDUCATION SUBCOMMITTEE

January 7, 1974

EXECUTIVE COMMITTEE
Officers
WILMA SCOTT HEIDE
President
JUDY LIGHTFOOT
Chair (Day of the Board)
NANCY F. WOOD
Secretary
BONNIE HOWARD
Treasurer

Vice Presidents
GENE BOYER
Finance & Fundraising
JUDITH A. LONNQUIST
Legal
ANN SCOTT
Legislation
VIRGINIA A. CARABILLO
Public Relations
MURIEL FOX
National Advisory Board

Regional Directors
East
JO ANNE EVANS GARDNER
FRANCES ARNOW KOLB
Midwest
KATHY RAND
South
JACKIE FROST
West
PATSY FULCHER
ELAINE MILLS
Asst. Regional Director, West

BOARD OF DIRECTORS
ASHTINEY ADAMS
PATRICIA BURNETT
M. J. COLLINS ROBSON
KAREN DECROW
MARCILENE DUNAJSKI
LYNNE TODD EDGERTON
LINDA FARRIS
GERALD GARDNER
CATHERINE (Rein)
GERI KENYON
MARLYNE KILBEY
ELAINE LATOURELL
MONNA LIGHTE
DEL MARTIN
MARY LYNN MYERS
PATRICIA McCORMICK
BETTY MENCONI
JUDITH PICKERING
MARJORIE SCHUCHAT
ARLIE SCOTT
ELEANOR SMEAL
SUZANNE STOCKING
CHARLENE SUNESON
[illegible]
TERRY ZWIGOFF

Senator Pell, members of the committee, thank you for the opportunity to appear here today.

I am Ann Scott, Vice President for Legislation of the National Organization for Women (NOW), and Associate Executive Director of the American Association for Higher Education. NOW is a national civil rights organization composed of women and men working to bring women of all races into the mainstream of American life. Founded in 1966, the oldest and largest organization of the new feminist wave, NOW has almost 800 chapters, and is represented in all 50 states, Puerto Rico, and the Canal Zone, plus chapters of American citizens in Taiwan, Hong Kong, Paris, and Belgium.

From early in our organizational life, NOW has been concerned with the rights of women and girls at all levels of education, both as students and as employees of educational systems and institutions. My first job in NOW was to form the NOW Compliance Task Force, and to develop in 1970 our Academic Discrimination Kit, which included the first affirmative action program ever written for women in any industry. Our energetic Higher Education Task Force is headed by Dr. Ellen Morgan of Princeton Junction.

Our concern with the effect of the energy crisis on women and girls in the education industry includes a number of areas:

1. The effect gasoline rationing could have on women as both teachers and learners, particularly those who are part-time.
2. The effect possible school closings could have on working women.
3. The participation of feminists in local, state and national energy planning bodies.

I. Possible gasoline shortages:

NOW is deeply concerned that the gasoline shortage could affect women who use educational services that require commuting. These would include urban or community college, and part-time students. In each of these categories where we have data, we find women to be increasing consumers at a

disproportionate rate as an examination of the appended table will show.

While men consumers of Higher Educational services still outnumber women, the gap is closing. In 2 year units (largely community 1972-73 colleges which serve commuter business), the growth rate between for women as compared to men was 14.2% to 8.3%, for full-time was 9% to 5.8% In universities where the part-time student is largely a commuting student, the growth rate of part-time women students between 1972-73 was 6% compared to 1.9% for men. So we see that women more and more are using services which would be likely to require them to commute to campuses. Thus the appeal of Mr. Simon to "students" to stop driving to campuses could disproportionately disadvantage women, particularly the older woman student who may be in the suburbs and less likely to know other students with whom she could form a car pool. Frequently these women see a return to college as a means of entry into the job market, and thus curtailment of their educational opportunities could mean curtailment of their employment opportunities as well.

Finally, night lighting should not be curtailed in such a way or in such places as to increase the danger of rape on campuses.

Further, though I have not been able to uncover data to support this, and can only speak from my own experience as a college professor, I am afraid that a gasoline shortage could adversely affect the employment of women as teachers in night school or Saturday classes. This committee is fully aware of the deplorable employment situation of women in the Higher Education Industry. In my experience, years of nepotism regulations and institutionalized sexism has resulted in the peripheral employment of women as college teachers - in extension and night school programs. At my former university, this was a place where wives holding advanced degrees but unable to teach on regular faculty appointments because of a nepotism rule, could pick up a little work. With women in the classic pattern of last hired, first fired, a curtailment of enrollments, closing of classes, could

disproportionately affect these women.

II. Possible school closings:

NOW's Legislative director for the state of Maryland, Dr. Casey Highes, stated NOW's concerns that public school closings could adversely affect women employed outside the home, very succinctly before the House Environment Committee. I quote from a letter she wrote to the subcommittee, the Public School Energy Task Force, on the subject:

> "Let me briefly reiterate why NOW feels calendar adjustments could be so disruptive. There are a quarter of a million working mothers in Maryland. Fifty-one percent of mothers of school age children in Maryland work. In metropolitan areas, this percentage is much higher. Two thirds of these women work out of pressing economic need, which means either that they are the sole support of their families or that their total family income does not meet the criteria established by the U. S. Bureau of Labor Statistics for even a low standard of living for a family of four. For these women's jobs to be placed in jeopardy could cause an economic disaster.
>
> "The schools are intended primarily to educate children. However, they also inadvertently serve as child-care facilities. So in considering calendar adjustments, you must take into account, not only the impact on education, but also the impact on the child-care aspects of the schools.
>
> "For generations women have been raised to sacrifice for others, and you will find us quite willing to do so again in this crisis situation. However, what you ask us to do must be within the realm of reason, and should be a burden commensurate with what men are asked to bear.
>
> "For each day that children are not in school, the working mothers face the possibility of not attending work. Most women are in low-paying jobs which allow little flexibility. They are given an average of ten

working days leave a year which they plan to coincide with scheduled school holidays. So you should work under the assumption that mothers do not have extra leave days that they may use. You should also realize that child-care is virtually non-existent. Where it does exist, it costs anywhere from ten to twenty dollars a day, which is more than many women make. Also, do not assume that fathers will share this responsibility. Deplorable as it may be, child-care is considered to be the mother's responsibility and it will be a rare father (if one is even present) who will contribute. When women apply for jobs, they are asked if they have children and what arrangements they have made for their care. Fathers are not asked these questions. Unfortunately, some mothers may be forced into leaving their children unattended rather than lose their jobs. This choice should not have to be made."

III. The participation of feminists in local, state and national energy planning bodies.

Because of the possibilities I have described, NOW feels that it is vital that persons concerned with the women's issues be represented on government energy planning bodies at all levels of government. This criterion is not satisfied simply by the appointment of any woman. Men can be concerned too. Appointments must be of persons - women and men - concerned with the status of women in this country and the adverse effects the energy crisis could have on us.

Women are over half the population, over half of our older population, sole or major support of 9 million families, 40% of the labor force, over half of every minority, most of those in poverty, and those most in poverty in this country It would be unconscionable for governments, state, local, federal, not to consult with those familiar with these issues in their planning. But I am not hopeful about the concern of government. I quote from the report of Dr. Casey Hughes on her experience in Maryland:

"... In November the Legislature passed a bill granting the governor

emergency powers to deal with the energy crisis. At that time, I testified before the House Environmental Matters Committee urging an amendment to prohibit closing of the schools, discussing the plight of the working mother and the lack of women in decision-making positions. The Lt. Governor testified against the amendment, stating that nothing should be prohibited, that it might become necessary. He stated that the Governor's office was sensitive to the plight of working mothers and that schools closing would be a last resort. He also assured me in private that we did not need to worry, and so did a member of the Governor's staff.

"Unbeknownst to me or the public, the Governor then created a Public School Energy Task Force composed mostly of school board presidents and school superintendents - 17 men and 1 woman! This group recommended that the Christmas vacation be extended three days, which the Governor then proclaimed in an executive order. All executive orders relating to the energy crisis must be approved by the Joint Committee on Executive, Legislative and Administrative Review. They held a hearing on Wednesday, December 12. Three NOW members testified against the order: Deborah Drudge of Montgomery County, Nita Farrell of NPG, and me. We came across well and got good media coverage out of it. The vote on the order was unanimously in favor. However, when I testified, I suggested that if they felt they must approve the order...then they should accompany their approval with the following requests to the Governor:

1. That the Governor publicly urge employers to be understanding of the problems the order created for working parents and not to penalize them.

2. That the Governor in the future consider school closing as a low priority.

3, That the Public School Energy Task Force be changed so that it reflects

the people it affects (women, parents, teachers, students) and that it hold open meetings and public hearings.

4. That the committee go on record now as being opposed to the 4 day school week (which the Task Force is considering).

"The Chairman of the committee, Sen. McAuliffe of Montgomery County, said these were excellent suggestions and suggested that that they be adopted. However, the vice-chairman, Del. Nickman from Queen Anne's County, insisted that they discuss and vote on each suggestion separately. Then they got bogged down in semantics and extensive discussion of each suggestion ...The overall vote produced passage unanimously for no. 1, and defeat by a vote of 3 to 4 for the other 3. ...

"At his press conference on Thursday, the Governor did follow through on suggestion 1, but the Evening Capital is the only place I saw it in the media. Also, I have been told that the Governor was asked by Jim Rowland of the Washington Star News 'Do you consider closing the schools a sexist position?' and the Governor replied 'It's not a position in any of the books I've seen'. "

So much for government concern.

Recommendations:

To prevent disproportionate hardship on women caused by the energy crisis, NOW wishes to make the following recommendations:

In the event of public school calendar adjustments

1. A shortened school week should not be approved unless a shortened work week has been also. Schools should not be forced to bear more of a burden than other sectors of the population.
2. If the shortened school week is approved, then employers who do not operate on a shortened work week should be strongly encouraged, perhaps required to provide child-care facilities or arrangements for their working parents.

3. If schools are required to close down for a period of time ... then certain schools should remain open and serve as child-care centers. This could be accompanied by appeals to employers to arrange child-care so that a minimum number of schools would need to be used. Assuming that full-time employees of the school system would continue to be paid, they could be used to staff these centers. Twelve-month employees such as psychologists do not get school holidays and would be available for staffing. Also, as needed, teachers could be assigned on some equitable basis.

4. In the event that temporary child-care centers must be set up, the regulations governing such centers might need to be relaxed during the period of crisis.

5. In any calendar adjustment, part-time workers paid by the hour lose pay. These workers are cafeteria workers (most, if not all, women) and bus-drivers (predominantly women and blacks). Anyone who takes such jobs at such low pay must be desperately in need of money. Women are particularly attracted to these jobs because the hours coincide with the hours their children are in school. NOW strongly suggests that these people be paid on days when schools have unscheduled closings.

On the Higher Education front

6. Institutions of Higher Education should consult with women employees and students on their campuses to make certain that they are not disproportionately affected or endangered by measures taken to deal with the energy crisis.

7. Finally, those concerned with the energy crisis as it affects women should be consulted and represented on all government bodies planning for the energy crisis.

Thank you.

National Center for
Education Statistics
U.S. Office of Education

Post-Program Office
Washington, D.C.
December 1973

FALL ENROLLMENT IN HIGHER EDUCATION, BY CONTROL OF INSTITUTION AND SEX AND ATTENDANCE STATUS OF STUDENTS

UNITED STATES
Fall 1972 and Fall 1973

INSTITUTIONAL CONTROL * YEAR AND PERCENT CHANGE**	Total enrollment, all institutions	Publicly controlled institutions: All students: Men: Full-time	Publicly controlled institutions: All students: Men: Part-time	Publicly controlled institutions: All students: Women: Full-time	Publicly controlled institutions: All students: Women: Part-time	Publicly controlled institutions: First-time students	Privately controlled institutions: All students: Men: Full-time	Privately controlled institutions: All students: Men: Part-time	Privately controlled institutions: All students: Women: Full-time	Privately controlled institutions: All students: Women: Part-time	Privately controlled institutions: First-time students
	1	2	3	4	5	6	7	8	9	10	11	12
ALL INSTITUTIONS, total												
1972	9,247,787	2,923,611	1,369,565	1,676,919	1,218,827	1,725,931	934,265	227,188	668,269	275,324	185,334
1973	9,602,762	2,961,571	1,433,435	1,708,182	1,262,183	1,801,732	917,402	222,823	682,158	266,182	180,094
% change	3.9	1.4	4.2	1.8	10.8	4.4	-1.8	2.9	2.0	4.4	-0.1
UNIVERSITIES, total (codes 1,4,5)												
1972	3,093,000	1,076,271	331,018	701,601	277,630	309,975	328,439	174,974	170,611	81,579	96,219
1973	3,192,261	1,108,442	337,237	734,211	294,215	291,214	317,470	175,208	175,911	66,936	91,519
% change	3.2	2.7	✓1.9	7.5	✓6.0	-5.7	-3.3	0.5	2.5	6.6	-1.9
Univ units (code 1)												
1972	2,645,978	906,904	239,365	569,241	211,755	260,343	314,539	157,442	163,922	77,496	93,164
1973	2,699,362	907,412	241,020	619,710	212,299	293,661	307,896	158,558	167,660	62,606	91,213
% change	0.6	0.1	+0.7	3.0	0.3	1.1	-2.2	0.6	2.3	0.6	-1.9
4-yr units (code 4)												
1972	358,128	134,465	54,617	90,645	47,655	50,951	9,900	6,832	7,691	4,123	2,751
1973	444,950	162,961	72,063	120,722	63,350	66,418	9,514	6,707	8,231	4,270	3,297
% change	24.2	17.5	31.5	32.0	23.4	29.2	-3.9	-2.6	7.0	3.6	1.7
2-yr units (code 5)												
1972	87,980	30,906	17,087	21,915	16,190	28,681					
1973	92,949	31,069	18,254	23,749	16,366	31,732					
% change	6.0	2.0	7.0	8.4	1.0	10.6					
OTHER 4-YR INSTS, total (codes 2,8)												
1972	3,333,647	830,216	314,524	497,318	335,433	249,866	565,634	166,538	448,345	132,719	203,115
1973	3,512,228	798,371	336,291	469,949	360,927	247,062	560,076	162,941	454,906	146,281	200,532
% change	5.5	-3.8	6.1	-5.6	7.6	-0.5	-0.9	-2.1	1.4	10.2	-0.9
4-yr units (code 2)												
1972	3,320,947	828,449	313,696	496,249	334,796	246,451	563,049	165,641	445,459	131,608	199,453
1973	3,340,283	796,612	327,636	479,506	349,697	245,110	557,736	161,912	452,041	144,717	200,900
% change	0.6	-3.8	4.3	-3.4	7.5	-0.6	-0.9	-2.3	1.5	10.0	+0.7
2-yr units (code 8)												
1972	12,900	1,767	1,128	1,469	1,037	2,405	2,585	897	2,886	1,111	2,662
1973	31,944	1,731	455	1,443	710	1,952	2,342	1,029	2,865	1,564	1,632
% change	+0.2	-2.0	-59.7	-1.8	-31.5	-18.8	-9.4	14.7	-11.8	40.8	-49.0
3-YR INSTS, total (code 3)												
1972	2,670,934	716,936	719,813	479,400	635,344	1,007,093	44,212	13,278	48,782	11,131	56,000
1973	2,917,253	761,363	740,237	523,973	726,621	1,063,481	43,129	13,713	51,630	13,284	54,623
% change	9.2	5.9	6.4	9.1	14.7	5.6	2.1	3.2	5.9	19.2	9.5
All 4-year units (codes 2,4)												
1972	3,679,075	962,914	372,313	586,894	382,451	297,402	572,949	172,473	453,150	135,731	202,204
1973	3,785,233	959,573	409,919	599,728	427,717	311,528	567,250	174,619	460,272	148,987	204,197
% change	2.7	-0.8	10.1	1.6	10.7	3.6	-1.0	1.3	1.6	9.8	+0.3
All 2-year units (codes 3,5,8)												
1972	2,771,814	751,141	738,029	502,784	654,591	1,038,179	46,797	14,173	51,668	12,242	59,662
1973	3,025,140	794,976	758,616	546,267	747,693	1,097,165	47,471	14,744	54,228	14,829	61,455
% change	9.0	5.8	2.8	8.6	✓14.2	5.7	1.4	4.0	4.9	21.1	3.1

---

*Individual institutions, branches, or other reporting units are categorized on the basis of the program in those units without regard for the category of the parent, or other related, units, although the relationships among units are recognized in the categorization. The six categories and their code numbers are:

Code 1 = A university unit, excluding its 4-year and 2-year branches
Code 2 = A 4-year unit which is not a university or part of a university, excluding its 2-year branches
Code 3 = A 2-year unit which is not a branch or campus of a university or any other 4-year institution
Code 4 = A 4-year branch of a multi-campus university
Code 5 = A 2-year branch of a multi-campus university
Code 8 = A 2-year branch of a 4-year multi-campus institution which is not a university

In the table above, these six categories are shown separately, and in combination to make up the traditional three-way classification of universities, other 4-year institutions, and 2-year institutions. Also, data are combined in still a different way to show enrollment in all 4-year (combined) units and in all 2-year units, without regard for relationship to other units. Combinations of the six basic code numbers are shown below:

Universities - Sum of codes 1, 4, and 5
Other 4-year institutions - Sum of codes 2 and 8
2-year institutions - Code 3 only

All other 4-year units - Sum of codes 2 and 8
All 2-year units - Sum of codes 3, 5, and 8

The institutional categories corresponding to the codes that follow are based on the three-way classification of universities, other 4-year institutions, and 2-year institutions.

Senator PELL. Thank you very much indeed for a very good statement, and for your recommendations.

[At this point I order printed in the record all statements and other pertinent information of all individuals who could not attend the hearing.]

ASCD

THE ASSOCIATION FOR SUPERVISION AND CURRICULUM DEVELOPMENT

A National Affiliate of the National Education Association • 1201 SIXTEENTH STREET, N.W., WASHINGTON, D.C. 20036 • (202) 833-4072

The Honorable Claiborne Pell, Chairman
Senate Education Subcommittee
Dirksen Senate Office Building
Washington, D.C. 20510

Committee Hearing on HR 11450
December 18, 1973

My name is Dr. Gordon Cawelti and I serve as Executive Secretary of the Association for Supervision and Curriculum Development. Our 12,000 members are curriculum directors, supervisors, and other leaders holding a prime responsibility for instructional programs of the nation's youth.

We strongly support the Murphy Amendment to HR 11450 (National Emergency Energy Act) which affords schools the same fuel priority as hospitals during the current energy crisis. We do not support any provisions which would curtail pupil transportation for integration purposes.

We are encouraging our members to recognize their responsibility for assuring that schools teach about resource scarcity and environmental education. In January, we are distributing a newsletter which urges schools to develop curricular experiences in these areas and provides helpful guidelines for accomplishing this.

We feel that it will work an extreme hardship on many familiesto have students remain home. The current school year, typically 175-185 days, is regarded as very minimal if we are to maintain current national standards.

The nation's schools currently enroll some 91% of the 16-17 year old age group compared to 67% in 1947. We feel that prolonged absences from school will prevent the schools from making further progress toward educating all of America's youth.

In many subjects, there is a close relationship between the level of skill or understanding acquired and the time spent in class. We would anticipate that prolonged absences will have a negative impact on achievement, and on the socialization processes so important to the maturation of young citizens.

In summary, ASCD members urge that you take the leadership in reassessing the priorities assigned to education and do all in your power to see that there is no retreat from this nation's historic commitment to a quality education for all youth. Even in wartime, the schools remained open for a normal school year. We urge support of the Murphy Amendment and defeat of any anti-busing amendment.

Sincerely,

Gordon Cawelti
Executive Secretary

National
Audio-Visual
Association, Inc. 3 5 0 SPRING STREET FAIRFAX VIRGINIA 22030 (703) 273 7200

January 4, 1974

Honorable Claiborne Pell
Chairman, Senate Subcommittee on Education
Room 4228, New Senate Office Building
Washington, D.C. 20510

Dear Mr. Chairman:

The National Audio-Visual Association appreciates your invitation to participate in the hearings of your subcommittee on the subject of energy shortages and their impact on education.

For your consideration, I am enclosing the statement which I would have been pleased to present as testimony before you. Unfortunately, during the week of January 7 I will be participating in the annual convention of NAVA in Miami Beach. Therefore, I will be unable to attend your hearings, as much as I would like to do so.

If you deem it appropriate, I would appreciate your making the enclosed statement a part of your hearing record.

Warmest best wishes for the New Year.

Sincerely,

Kenton H. Pattie

Kenton Pattie
Vice President and
Educational Director

KP/mm
Enclosure

STATEMENT BY
KENTON H. PATTIE
VICE PRESIDENT AND EDUCATIONAL DIRECTOR
OF THE NATIONAL AUDIO-VISUAL ASSOCIATION
BEFORE THE SENATE EDUCATION SUBCOMMITTEE
JANUARY 7, 1974

RECOMMENDATIONS FOR REDUCING THE ADVERSE EFFECT OF THE ENERGY CRISIS ON AMERICAN EDUCATION

Mr. Chairman:

In behalf of the members of the National Audio-Visual Association, I wish to commend you and this Subcommittee for bringing to the public's attention the impact of the energy crisis on education.

We are particularly grateful because, during the past ten weeks, this Association, as a high priority, has been appealing for special Congressional and Executive Branch consideration for education and health.

I regret to report that, to date, there has been little response to these appeals and until this hearing was announced there had been no clear evidence that anything would be done. The absence of any action in this area by other committees of Congress and by the Administration suggests the need for a position of advocacy by this Subcommittee. While we do not recommend that you be diverted from your present heavy responsibilities with regard to early enactment of authorizing legislation, we do believe that, because you understand the nation's educational needs better than anyone else, you could make some very significant recommendations in the area of national energy policy.

The Energy Crisis and the Federal Effort

It has been widely reported that the Administration is recruiting oil company executives to advise the Federal Government on energy policy matters. While we all understand the President's interest in obtaining knowledgeable advice on production problems, we seriously question the ability of oil company executives to assess and respond to the relative problems of the consuming end-users such as schools, hospitals, etc.

Therefore, we recommend that a Special Task Force on Education and Health be created as part of the proposed Federal Energy Emergency Administration (S.2776 which passed the Senate December 19, 1973).

The Task Force would be a full-time working unit within the Administrator's staff, act in an advisory capacity, issue monthly public reports, conduct public field hearings, and recommend legislation where necessary to the Congress. The Task Force would be composed of education and health experts on leave from their positions in their respective committees; they should be appointed by the President with approval of the Senate Committee on Labor and Public Welfare and of the House Committee on Education and Labor. While the Administrator would be under no special obligation to follow the advice he receives from the Task Force, the Task Force staff would be required to bring its findings to the public through monthly reports and through recommendations to the Congress. While such authority is unprecedented, it appears necessary to help offset the probable "tilt" toward the oil producers purportedly planned by the Administration.

At this hour, the Administration needs within its circle of advisors a consumer's voice, a viewpoint sensitive to the requirements of education and health. In the absence of such a voice, we fear that schools will be forced to close and teachers will be cut off from the instructional tools they need to do their job.

This Association has had some very good experience with similar advisory staffing within the Executive Branch. For example, the Commission on Government Procurement, established by Congress, was staffed by experts on

leave from jobs in industry and government. The Commission membership and staff were balanced -- the government as consumer had as much weight as industry the provider -- and we feel that the findings of the Commission were balanced and fair. The Commission report contained all sides to each issue and ample opportunity was given for minority views and all relevant supporting data was made public. We feel that unless some steps are taken along these lines, with respect to the Federal Energy Emergency Administration, the public's trust and support for our national energy policies will suffer. The proposed Task Force would assure for the American public that the consumer's viewpoint was being considered, that all facts concerning the consumer's needs were being researched and published, and that the government had not sold itself to the giants of the energy producing industry.

The Energy Crisis and Educational Media

My second recommendation relates to what this Association believes has been an extremely one-sided, imbalanced Federal response to the energy crisis.

We are all too well aware of the need to conserve fuel oil, gasoline, propane, electricity, and other sources of power and warmth. The members of this Association are willing to do our share, to bear our burdens, along with everyone else. We believe the schools we serve feel the same way.

However, we have heard no Federal official advocating a reduction in the public consumption of non-essential plastics--despite the fact that plastics are produced from the same crude oil which is currently in short

supply.

It is interesting to note that none of the Executive Branch pronouncements and neither of the two emergency energy bills of the past two months have directly addressed the complex problem of petrochemicals, but have instead skirted the issue. The Administration has recommended no particular action in this area and so far the Congress has not taken up the whole question. In fact, the deliberate omission of "ethane" (Section 3 (5) and (6)) from the definition of refined petroleum products P.L. 93-159 (Signed Nov. 26, 1973) appears to prevent allocation of petrochemicals by the Administration. Why? Because "ethane" is an essential raw material needed for thousands of plastic products. In the House version (H.R. 11450) of S. 2589 (The Energy Act), provision is made to establish education and health (Murphy amendment sponsored by Rep. John Murphy of New York) as among those vital priorities requiring special consideration, however because of the absence of "ethane" in the definition of refined petroleum products, this language does not appear to apply to plastics. NAVA strongly supported the House language, despite its nonapplicability to plastics because we believe, as I am sure you do, that the heating and power needs of schools, hospitals, and health centers are critical to the well-being of the United States. However, we were disappointed that the House did not choose to go far enough on this problem, just as we are equally disappointed that the Administration has not yet come to grips with the national plastic shortage.

The plastics issue is obviously of crucial importance to the audio-visual field, for most of our products--both instructional and library materials and classroom equipment--are made in part or in whole from one of the plastics family.

Unless steps are taken to slow down the public consumption of non-essential plastics and to allocate the present short supplies of petro-chemicals, the education community will be unable to obtain the instructional tools it has come to rely on. Education is not alone. Health institutions are equally reliant on plastics for syringes and innumerable other items which are the tools of the health professional. (The Senate Subcommittee on Health received testimony on this subject during its hearing, December 17, 1973.)

Some may wonder if there is enough audio-visual equipment and enough materials already in the field -- in classrooms, libraries and media centers -- to avoid a major impact on education. In some situations we find that there are schools which will manage for a short period of months because either with their own recources, or with the help of the Federal government through Title III of the National Defense Education Act -- so ably supported by this Subcommittee -- or through some other Federal program, they have been able to acquire a minimum of required instructional resources. (There are 80 per cent according to a recent survey which do not today have adequate instructional media programs.) However, for the vast majority of the nation's schools, the energy crisis will simply postpone the dawn of a new era in instructional methods. And for the children and students being asked to forego the latest teaching techniques, the wait is simply an irredeemable loss. There just is no way to recapture lost time.

For many teachers beginning their first year in the classroom, the shortages will mean they will not have available the materials and

equipment they have been trained to use. For teachers who have long been using audio-visual techniques, the shortages will mean:

-- long periods in which perfectly good equipment cannot be used for lack of a replacement part because spare parts are not being produced.

-- frustrations in planning curriculum, because of the uncertainties of what is and is not presently available.

-- high prices, exceeding present budgets, because costs are soaring.

For the school, community college, university, medical school, etc., the shortages will mean disruption of plans to install individualized instruction systems. And for every school board which had set aside money to cover part or all the cost of an educational technology project, the energy crisis will spell disappointment.

As you may know, the most publicized energy-related shortage affecting our industry is with polyvinyl chloride. PVC is required for educational records, and for many other audio-visual parts and products. In the absence of PVC several other industries have had to close entire plants (during the last two months), such as those producing vinyl piping for agriculture. We fear similar shutdowns in our industry unless proper steps are taken. For eight weeks, many members of NAVA's Educational Media Producers Council -- consisting of the leading small educational record producers in the nation -- were cut off from supplies of records because their supplier was denied his share of PVC by a major petrochemical company.

Because the audio-visual industry consumes such a small supply of PVC compared to the giant users and such a small supply compared to the popular record producers, we fear we will be trampled on by the big users and the big petrochemical companies in the shortages market place. Despite the critical importance of our end product, our leverage will be small. This can easily be seen when you note that an educational record may only sell 250 copies in its lifetime, this requiring very little PVC, while a popular record may sell 250,000 copies in a couple of months, this requiring a considerable supply of PVC. You will be interested to know that, according to the National Education Association and many audio-visual directors around the nation, teachers want audio-visual materials to help teach students about "energy" and about the nation's energy problems. Generally, NAVA members would have responded rapidly to this need by preparing educational materials which would help interpret this national problem for our students. But with the shortage of vinyl and and other plastics, we have had to curtail the production of new materials regardless of the merits of the teacher's requirements.

Here are comments by audio-visual professionals within NAVA and within our Educational Media Producers Council who responded to a recent NAVA Energy Questionnaire in which we asked the question: "If you run out, and are unable to re-stock with materials and products (due to shortages) your business will, of course, suffer. However, how would you assess the impact on your customers--the nation's schools, health centers, etc.?" Here are a few of the many answers which we received:

STATEMENT OF KENTON PATTIE
PAGE 8

□ "If we run out of stock and schools cannot get the materials on time, they would be forced to cancel their orders. The whole thrust of A/V education would be halted. Many of these materials are aimed at individual instruction, both for the slow learner and for the child who can work ahead of the rest of his class. Education will once again have to be concerned only with the average student, and the exceptional child at both ends of the continuum will once again be neglected."

"Customers would be able to substitute print matter for audio visual material but will not find this as effective a teaching tool as AV is. Also, with replacement parts not available the initial cost of programs would not be written off over the number of uses which were intended when the programs were purchased."

□ "We would be unable to meet the needs of individualizing instruction to that portion of the school population that finds so much success in this endeavor."

□ "If shortages should force us to curtail manufacturing we obviously would not be able to fill orders from our school customers for educational materials they feel are essential for their instructional program."

□ "If schools are unable to buy audiovisual products with vinyl and other plastic components, two serious effects will occur:

1. The present trend toward making AV materials more accessible to students and teachers will be halted or reversed. Great strides have been made in the past four years in placing materials in classrooms and libraries where they are easily available for use. This practice has

proven very effective educationally, but requires greater quantities of materials than the traditional practice of centralizing the storage and management of materials.

2. A shortage of our materials would particularly hurt children who have difficulty in reading. Some of our materials teach reading skills. Others bring knowledge to children who do not have the ability or desire to gain that knowledge through reading."

- "Training programs will suffer."
- "Teachers could not replace damaged or worn out materials."
- "Materials and equipment for the handicapped would be among the first to be cut."

Most members responding to the questionnaire said they could continue supplying schools with existing inventories into the second semester of the current school year. Most said they are being forced to curtail plans for production of new materials and products. All reported fear for the period beginning in late spring, for most have been warned by the petrochemical companies that supplies will be short or cut off for two or three years. Shortages of several months we can survive, but two or three years would spell "disaster", both for the manufacturer and producer and for the educational system which has come to accept instructional technology as crucial.

Therefore, we hope that the American people will be asked to curtail unnecessary purchases of plastic products so as to leave supplies available for education and health. We hope this Subcommittee can be helpful

in communicating this message. Furthermore, we hope that every effort will be made in Congress to assure that if we need to allocate short supplies of vinyl and other plastics, that the administrative authority is created to do so.

This Association is prepared to do everything it can to help the education community which we serve, in every way possible. We will bear our burden of the national crisis equally with other sectors of our economy. But we cannot do the job alone, we need the support of the education and health communities and we particularly need the help and leadership of the Senate Subcommittee on Education during the very difficult months and years ahead.

We appreciate this opportunity to share our views with you.

Education Commission of the States
300 LINCOLN TOWER • 1860 LINCOLN STREET
DENVER, COLORADO 80203 • (303) 893-5200

January 14, 1974

The Honorable Claiborne Pell
Chairman, Subcommittee on Education
United States Senate
4228 New Senate Office Building
Washington, D. C. 20510

Dear Mr. Chairman:

Transmitted herewith are the results of a study recently conducted by the Education Commission of the States regarding the impact of the current energy crisis on the education systems of the various states throughout the nation.

You will note that the questionnaire was forwarded to fifty states. At this point in time 64 respondents from 44 states have completed the questionnaire and returned it to us. A great deal of similarity exists in the responses, while at the same time there are a great deal of inconsistencies in all the states. You will also note that most states are conducting studies of their own within the state to determine what further steps should be taken should the crisis become more severe. We will be more than pleased to furnish additional information regarding this subject as it becomes available to us, if it will be of value to your committee.

May I take this opportunity to wish you continued success in your deliberations.

Warm regards.

Sincerely,

Robert B. McCall
Deputy Director

RBMc:pcg
Enclosure

EDUCATION'S RESPONSE TO THE ENERGY CRISIS

A Survey of Forty-Six States

Prepared for

The Honorable Claiborne Pell
Chairman, Subcommittee on Education
United States Senate

By
Doris M. Ross
Department of Research and Information Services
EDUCATION COMMISSION OF THE STATES
1860 Lincoln, #300
Denver, Colorado 80203
(303) 893-5200

27-765 O - 74 - 17

EDUCATION'S RESPONSE TO THE ENERGY CRISIS

This testimony is based on a fifty-state survey, conducted in December 1973, which asked respondents in state departments of education and state higher education executive offices to report on the education community's reaction to the energy crisis. The ECS survey asked for, essentially, (1) facts, i.e., how has your area of education responded to the energy crisis; (2) opinion, i.e., what part of the energy crisis will hit your state's education community the hardest, and (3) conjecture, i.e., what action could be taken to alleviate the situation, should it continue for any length of time. Sixty-eight respondents in forty-six states sent back completed questionnaires from which information was extracted for this report.

Energy Crisis or Information Crisis?

Because the questionnaire called for opinion and conjecture as well as factual information, some of the respondents complained about the general lack of information relating to the energy crisis, and discrepancies and inconsistencies in the small amount of information which was available. For example:

West Virginia (Elementary-Secondary Respondent): "The long range effect cannot be known at this time. It will depend on the adequacy of energy supplies and the actions taken by the federal and state government."

Florida (Elementary-Secondary Respondent): "Until the extent of the severity is known, there is no way to accurately predict the effects upon school operations."

Rhode Island (Elementary-Secondary Respondent): "Lack of reliable long range information relative to supplies of fuel make it difficult to forecast . . . We tend to be optimistic, lacking specific information . . ."

Vermont (Elementary-Secondary) "It appears to us that all school districts -- all states -- are groping in the dark -- no one can give any concrete indication as to what the monthly fuel oil and gasoline allocations will be."

Maryland (Elementary-Secondary): "We simply don't have enough data to respond to this (long-term projection)."

Massachusetts (Elementary-Secondary): "Our most immediate problem is one of information. The federal government does not have statistical information, or has not made it available, or what is available is conflicting. The oil companies are not providing information relating to supply. And all that is being discussed is national averages . . ."

States Take Uniform Action

All responses to the survey indicated that standard energy conservation measures are almost universally in use across the country, and were triggered in each state by a governor's executive order or request, through a state agency, or at the local level. Energy crisis commissions, committees, task forces and coordinators abound at all levels of government. Continuing fuel inventories are being made. Meetings, seminars and workshops on all areas of the energy crisis (heating, gasoline and electricity) are being conducted at state,

regional and local levels. Brainstorming sessions are unveiling unique approaches for the education community to consider if normal elementary, secondary and postsecondary school operations are further disrupted by the energy crisis.

Because of the tremendous amount of publicity the energy crisis has received, and because of the countrywide sameness of the initial reaction of the education community, this paper will deal with facets of the crisis which go beyond the immediate situation. However, for your information, representative samples of fuel conservation guidelines for both school buildings and transportation are included in the appendix.

Short Term: Fuel Shortages -- Long Term: Fiscal Shortages

While the gross effect of the energy crisis varies from state to state, more than half of the states reported transportation as the most serious short and long term energy crisis area; a dozen or more reported heating as a major concern; others felt both areas would be vital. Rising costs of both heating and transportation fuel were mentioned frequently. Recent price raises have already created budget problems and without price freeze protection the long-range picture is not good. The following statements provide some indication of state concerns:

Colorado (Elementary-Secondary Respondent): "Severe shortage of gasoline and propane could cause school closings this year. The immediate effect is to curtail all activities we have been trying to implement: better use of school facilities; more use of community resources; limiting student participation in extracurricular activities; cutting back on physical, band, speech and other activities requiring the use of transportation."

Iowa (Elementary-Secondary Respondent): "Transportation and heating will hit Iowa the hardest. Already, three schools have had a 'scare' from not having more than two days' supply of gas available for school buses. Gas was obtained before the storage tanks were drained -- but with gas less plentiful from week to week, 'busing' could be seriously restricted. Many of our schools operate on fuel oil and many operate with 'interruptible' natural gas. Thus, in periods of extremely cold weather, those schools are forced to 'switch' to oil -- a fuel that is already very limited in supply. Consequently, the additional drain on our fuel oil supplies may be so critical that schools may have to close for a few days or even a few weeks. Such severe change will, indeed, have a resulting effect on the regular school routine. It probably will result in a longer school year, unless by legislative action a shorter school year is approved."

Utah (Elementary-Secondary Respondent): "The supply of automotive fuels . . . may present a problem. Utah is a rural state and 95,000 students are bused daily. The total annual mileage for all schools is 10.2 million."

Alabama (Postsecondary Respondent): "I expect the shortage of gasoline will have the greatest impact here. The junior colleges and technical schools provide bus transportation for students. There may be more students needing and wanting transportation and not enough gasoline to provide the buses. Enrollment in commuter institutions may be affected as prices rise and gasoline grows scarce."

Oregon (Postsecondary Respondent): "The area of the energy crisis which affects some state institutions the greatest is heating, especially those institutions on interruptible gas service. The indications are that gas service will be interrupted for about ten times as long in the 1973-74 heating season than the 1972-73 heating season. Further, the oil supplier for most of these institutions has been able to deliver only somewhat less than the previous year's total. Until such time as some allocation methods are established, institutional personnel will continue to be extremely busy seeking additional supplies and stretching existing supplies by a number of methods, many of which are time-consuming. The effect has been to reduce to six hours per day the supply of steam to noncritical areas in addition to lower temperatures, etc."

Missouri (Elementary-Secondary Respondent): "At the moment, it appears that school districts having an interruptable service contract with a natural gas company will be hit the hardest. If gasoline becomes harder to obtain, this would also be a serious problem in the education of Missouri young people. At this time, it would be difficult to determine the short and long term effects on the educational process. We certainly feel that the education of our young people should be one of very high priority. The future of our entire nation is in the hands of today's learners. Therefore, it is imperative that our educational standards be maintained and not permitted to become diluted at this time."

Maine (Postsecondary Respondent): "Maine expects a bad winter because of our dependence on overseas oil. Heating (including electricity) has to be the critical area, but we must have gasoline to move goods or we will run out of food and lose employment as factories close. In other words, we have a CRISIS. If oil literally runs out in February, colleges will have to close before factories, hospitals, homes. This will cause grave academic and employment problems. The long run effect will be stimulation of energy conservation on a permanent basis plus closer involvement of the university in an expert resource role to government and industry. Perhaps new academic calendars will result with winter rather than summer vacations."

Massachusetts (Postsecondary Respondent): "Shortages in gasoline are currently being felt by commuting students. The potential for closing institutions due to cold is very real. We are told that 85 per cent of our residual oil is imported and that one-half of this is affected by the Arab cutoff. This means that rolling blackouts of electricity are a likely event. In the longer term, the energy crisis is going to leave many scars. Capital outlay is already being curtailed or reevaluated. Budgetary inflation in fuel accounts is out of sight, and will continue. More carefully programmed schedules will be required."

States Develop Contingency Plans

But whether the problem is one of getting the student to school, keeping him comfortable (warm or cool) after he gets there, or paying the bill, the fact remains that the traditional education process may well be altered by a continuing or worsening energy crisis. This has both good and bad implications, which are revealed by a review of contingency plans being developed across the country.

One of the most obvious ways for schools to conserve energy is to regulate the times the buildings (and the buses) are in use by adjusting the school day, week or year (a shortened school day in cold weather, a four-day week, changes in the length of the school year, changes in vacation periods). A few of the states responding to the ECS survey (and some isolated individual districts)

have already dismissed classes on cold days or extended their Christmas vacations for a few days without particularly dramatic impact. It should be pointed out here, though, that social resistance to this practice seems to be high, particularly from working mothers, and secondary and postsecondary students who depend upon part-time jobs to finance their education.

A few postsecondary education institutions are adjusting their school calendar this year, while many more are considering adjustments for next year should the energy shortage continue. For example, New Hampshire's postsecondary respondent reports that the "academic year calendar was adjusted at the University and the State Colleges" -- by compressing the first semester to conclude by December 22 and beginning the second one on February 4, adjusting vacation and end-of-second-semester schedules to make up lost time. Athletic schedules have been revised, and in most instances curtailed.

State Legislative Changes

Extensive changes in school time periods present some very real problems with elementary-secondary school attendance laws and school finance. A majority of the fifty states have laws mandating a school year of from 172 to 184 days, with state financial aid to local school districts based on fulfillment of the time requirement. Some state legislation goes even further by defining the length of a class period, school day, school week and school term. In some states, the state board of education is authorized by law to establish these school time schedules.

In the postsecondary schools, degree requirements and school accreditation could be among the areas affected.

Within this kind of framework, then, it is obvious that either the lost time caused by the energy crisis must be made up, or new legislation/regulations must be instituted. Two states have reported enactment of special legislation affecting the school year at this point; six states have reported such legislation under consideration; and one state (Massachusetts) has reported changing state board regulations:

Wisconsin (Elementary-Secondary Respondent): The legislature, in a special session late in 1973, enacted legislation (Chapter 157) relevant to the "ENERGY EMERGENCY AND SCHOOL OPERATIONS. In the event that an energy emergency . . . results in the reduction of fuel supplies that may require curtailment of the operations of public elementary and high schools, the determination as to how to meet such crises shall be made locally by each school system or district. Changes in terms and conditions of employment proposed to meet such crises, other than salaries and wages, shall be negotiated between the school board and the bargaining representative of the employees. Employees of any school system or district in which school operations are curtailed or in which schools are closed due to an energy emergency shall receive full payment of salary or wages under their employment contracts or arrangements as if there had been no such interruption in closing . . . full state school aids shall be paid to districts that fail during an energy emergency . . . to comply with the days of school required by that section."

Florida (Postsecondary Respondent): A comprehensive energy emergency proposal under consideration by the Florida legislature would give the governor authority to declare an energy emergency and to suspend or reschedule public school or university activities and classes, and to waive or suspend the minimum school term requirement.

Minnesota (Elementary-Secondary Respondent): The governor's office has prepared a legislative proposal which would give the chief state school officer extended power to change the school week, day or year, to control energy use and energy conservation in school buildings, to close buildings and consolidate students and classes, to maintain an energy supply inventory, and to assure full payment of state aids in instances where compliance with legislation or the chief state school officer's directives make it impossible for a school district to comply with the minimum school year requirement.

South Dakota (Elementary-Secondary Respondent): Proposed legislation being prepared by the state department of education would give school boards the authority to declare those days when the school must be closed due to insufficient fuel for part of the school term, and the authority to adjust the calendar for the school term to cope with such emergencies. The South Dakota respondent further noted, as did a number of other respondents, that altering school time periods would have an effect on teachers' contracts and the terms provided in them, school accreditation, school finance, etc. He listed possible legislative changes as (1) amend the definition of school day, week and term, and the methods of making up days by allowing the state board of education to modify them whenever the governor declared an emergency to exist; (2) repeal all the laws pertaining to the school day and school term and allow the state board of education to designate them; (3) amend the section on days of legal discontinuance to allow for this fuel crisis; and (4) amend the section on days of legal discontinuance to provide for a more general statement on "Acts of God" to allow for various types of unpredictable situations which might arise.

Further, the respondent reported that the state board of education had passed a resolution on December 6, 1973: ". . . during the energy crisis affecting all elements of the elementary and secondary education systems in South Dakota, that school governing bodies may direct school administrators and teachers to initiate a system of independent study for pupils for those days when schools(s) must be closed due to the unavailability of sufficient fuel to maintain a healthful environment within the school building, and that a maximum of ten such days may be counted as 'days in session' during one school term." Definition of 'day in session' was extended to include "days the school may be closed due to the energy crisis and the students engaged in independent study at home according to a program of study which has been planned by their teachers."

Massachusetts (Elementary-Secondary Respondent): The state board of education has adopted emergency regulations for the school year and the school day (effective December 18, 1973) applying to the 1973-74 school year only which set aside the 180-day minimum school year requirement and place the length of the school year on an hourly basis, ranging from 900 hours for elementary schools to 1080 hours for vocational schools.

Pennsylvania (Elementary-Secondary Respondent): Senate Bill 1331 has been introduced, and would give the governor certain energy powers which include the closing, extending or restricted hours for all schools and other public institutions, and which, during an emergency, would suspend contract provisions of public employees, including teachers.

Maine (Postsecondary Respondent): The governor's office is proposing legislation to give the governor emergency powers which would include closing of schools, but would not necessarily apply to postsecondary education.

Illinois (Elementary-Secondary Respondent): House Bill 2109 has been introduced, and would provide that if a school makes every good faith effort, but cannot procure the energy resources necessary to keep school open for the entire minimum school term, the state aid claim need not be reduced.

North Dakota (Elementary-Secondary Respondent): Chapter 154, enacted in 1973, provides that "the existence of a state of emergency may be proclaimed by the governor if he finds that an act of God has occurred and that the safety and welfare of the inhabitants of the state or of any portion thereof require the closing of schools or any particular school. Any such emergency shall terminate upon the proclamation of the termination thereof by the governor. Any school district which is located within the boundaries of the territory included within the governor's proclamation of a state of emergency or designated by it may include days actually lost, not to exceed five days, during which school was not held because of such state of emergency for purposes of the foundation program . . . Any school district in which schools are closed for in excess of five days in any school year because of such a state of emergency shall receive two days of credit for foundation program purposes for each additional day school is held to make up for such lost days." The respondent apparently feels that this legislation would apply to an energy crisis emergency; some other state respondents have indicated that they do not consider their state's "Act of God" legislation specific enough.

Montana (Elementary-Secondary Respondent): Legislation prepared by the governor's office and already introduced would permit local school districts to operate schools four days a week instead of five during the period needed for the conservation of fuel.

As is obvious from the above examples (see South Dakota and Wisconsin) state legislation changes made necessary by an extended or more acute energy crisis involve more than school time periods.

Specific Effects of Gasoline Shortage

As noted earlier, the transportation picture appears to be particularly grim, should the energy shortage worsen. Primary conservation measures in many states, i.e., reduced speed limits, consolidation of bus routes, elimination of bus service for those students who live close enough to school to walk, and cutbacks in field trips and other activities requiring school bus transportation can be tolerated -- but not welcomed -- as necessary adjustments. Major cutbacks in gasoline and diesel fuel and the resultant busing reduction, of course, would interfere with regular school attendance for students, and provide financial problems for school districts in states which base aid to districts on average daily attendance -- another legislative problem!

An Ohio postsecondary respondent notes: ". . . the long term effect (of a continuing gasoline shortage) will be more serious since one of the purposes of education is to expose students to a wide variety of cultural and life alternatives. This exposure is achieved through cultural events (dances, plays, conventions) scheduled at the schools on weekends or evenings. Field trips have been substantially reduced already because of the cost of gas. These trips are most beneficial to the two-year institutions -- many of which are located in rural areas. The end result of curtailment of these kinds of activities is a less educated person and a static community."

Noon transportation for kindergarten youngsters is being suspended in some districts, adds the Ohio elementary-secondary respondent. "Some schools are changing from a half-day kindergarten session to a full day; the former morning groups may attend full day sessions for three days a week and the afternoon groups attend two days a week. They alternate the arrangement for the following week."

A perhaps unexpected twist to the gasoline shortage was reported by a Pennsylvania elementary-secondary respondent: "State law, Act 372, requires that nonpublic school students be transported by public school buses. As a result, school districts are using approximately 20 per cent more gasoline and receiving 10 per cent to 15 per cent less than last year's allocation. This would indicate that school districts are operating on 30 per cent to 35 per cent less fuel than is required. The impact of this may result in temporary school closure several days each month since gasoline is allocated on a monthly basis."

"Over 50 per cent of Michigan's elementary and secondary pupils are transported by school buses, " says that state's respondent. "Unless provisions are made to provide gasoline in sufficient supply, serious problems will arise." Short term effects were identified as "loss of days of student instruction and difficulty of making up and implications for collective negotiations agreements (with teachers)." In the long term, "serious consideration must be given to substantially altering the school year -- e.g., winter vacations in lieu of summer."

Rising Costs Multiply Problems

While many state respondents mentioned the overall effect of a sustained energy crisis on the general economy -- high shortage states and tourist states would suffer most because of employment problems and the resultant losses in tax revenues for education -- many more respondents pointed to the spiraling costs of both heating and transportation fuels as a major problem. "If you can't afford to buy it, it doesn't matter whether or not it's available" was the general feeling of many state responses to the ECS survey:

Alabama (Elementary-Secondary Respondent): "A number of school systems have had to curtail activities and meet rising costs." -- South Dakota (Postsecondary Respondent): "We are not adequately funded for the increased cost of fuel so expect emergency legislation to provide these funds." -- Nebraska (Elementary-Secondary Respondent): "The cost of gasoline and its availability are posing real problems for Nebraska schools." -- New Hampshire (Postsecondary Respondent): "University of New Hampshire system is operating on a very tight budget for 1973-74 and cannot absorb deficits due to unforeseen sharp increases in costs of oil, gas and electricity. Implication is that deficits incurred this year

will have to be made up out of 1974-75 operating budgets and with state appropriations already set for that year, we have no reserve or margin to offset 1973-74 deficits. Long term effects are primarily financial: we will require increased state appropriations and/or increases in student fees." -- Colorado (Postsecondary Respondent): "Increased costs of fuel, as well as the anticipated shortages, have direct effect." -- New Mexico (Elementary-Secondary Respondent): "cost of fuel . . ." -- Washington (Elementary-Secondary): "To date, the problem has not been a lack of supply but increasing costs and a fixed budget. The Seattle School District estimates that heating oil alone will cost the schools an additional $400,000 of prices were frozen where they are now." -- Oregon (Postsecondary Respondent): The long term effect will undoubtedly be considerably greater concern for the life-costing of facilities including the supply of heat and other utilities." -- Ohio (Postsecondary Respondent): "Already our reports from schools indicate that fuel oil is very difficult and expensive to purchase." -- Massachusetts (Elementary-Secondary): "The governor has submitted legislation to a special session which would grant him broad emergency powers over allocations, credit, prices . . ." -- Maryland (Elementary-Secondary): "We support fuel rationing with a reasonable priority for schools, plus firm price controls. We cannot compete for scarce resources with others whose ability to pay exceeds our own." -- Massachusetts (Postsecondary Respondent): "Capital outlay is already being curtailed or reevaluated. Budgetary inflation in fuel accounts is out of sight, and will continue." -- Montana (Postsecondary Respondent): "An increase in transportation costs and costs of utilities would cause severe budget problems in Montana postsecondary education institutions."

Not all of the reaction to the energy crisis is negative, however. John Gardner, former HEW secretary, said it: "We are all faced with a series of great opportunities -- brilliantly disguised as insoluble problems." Some of the survey respondents reflected this attitude.

Tennessee's postsecondary respondent said, "The long run will see efforts made to (a) seek out new energy sources, (b) design buildings with the idea of minimizing energy use, (c) continue to maintain the conservation measures implemented in the short run, and (d) convert existing energy consumption devices which are dependent on scarce energy resources to those sources which are relatively more abundant."

In Colorado, the elementary-secondary respondent said, "The long term will be to relook at the goals and objectives of our schools in terms of this new way of life we have entered. We will need to relook constantly at our use of energy as it relates to instruction and career education. We will need to take another look at the year-round school concept and how we propose to improve the quality of education under these new restrictions. This energy crisis necessitates educators relooking at education and all phases of the educational program."

"Long term effects may well prove to be positive," said the elementary-secondary respondent from Massachusetts. "We are restudying the regulations for length of school day and school year and have voted emergency regulations. Result may be a permanently more flexible approach. Further, we are now more seriously into off-site learning programs, alternative schools and learning packages as options to the traditional concept. This will have significant impact on education. Perhaps most important, the crisis presents the whole communit with a rich learning situation which we are urging schools to utilize."

27-765 O - 74 - 18

Rhode Island's commissioner of education, Fred G. Burke, told his state's school superintendents: "We are facing a very difficult situation, but one which also offers opportunities. Public education is vital to the survival of our democratic society. We have an opportunity to show the way by example and by developing awareness in our students, and to show that education has a high priority in our society."

And from Illinois elementary-secondary respondent: "Schools, like other large facilities, tend to waste too much of their energy demand. The energy shortage will serve to lessen this waste. In the future, architects and engineers will design schools better suited to environmental needs. Energy conservation will also influence mechanical systems adopted for new facilities."

Conclusion

The educational process, no matter how it is carried out, should be considered one of the major keys to the economic, political and social success of a nation, and in addition, it is classified as "big business" by the states themselves in terms of the amount of money spend and the number of people employed. The Education Commission of the States supports the establishment of a fair and reasonable allocation system for all types of fuel, paired with firm price controls, with the nation's schools assigned a priority which will enable them to continue to undergird the future of this country by providing a sound educational base for its citizens.

A further conclusion of this study is that the states and education decision-makers need more information for planning:

1. Information on the decline in tax revenues caused by the energy crisis which would result in decreased revenues for education;

2. Better information on the present and future availability of fuel and gasoline for schools;

3. Comparative information on the beneficial effects of current energy-saving measures; i.e., thermostats to 68 -- speed limit to 55, etc;

4. Information on reductions in health and safety for students as a result of energy crisis; i.e., rape of student in California, going to school in the dark;

5. Enrollment changes and student population changes as a result of declining employment or other recession type "side effects" of the energy crisis;

6. Information on the coordination of community and state resources; i.e., combining of city and school transportation programs;

7. Reduction in the quality of education as a result of the energy crisis;

8. The number of school-pupil days that have been lost as a result of the energy crisis.

1/15/74dr

APPENDIX

FUEL CONSERVATION GUIDELINES
STATE OF FLORIDA

Reproduced by permission of Mr. Bing, Deputy Commissioner,
Florida State Department of Education

MEMORANDUM

TO : All District School Superintendents

All Community College Presidents

All State University Presidents

FROM : Floyd T. Christian

SUBJECT : Conservation of Energy

The rapidly changing information we are receiving from the federal government indicates that Florida will face a sevore fuel shortage this winter. Our petroleum supplies are currently estimated to be 20 percent less than what we would ordinarily need this winter.

Governor Askew has requested that substantial energy conservation measures be taken to reduce energy consumption in all public buildings, including our schools and courthouses.

In view of the critical shortage of energy which as been forecast for this winter, we should all act together to conserve all forms of energy. Only through cooperation by all can the state and nation survive this shortage without more serious consequences.

This can be accomplished through relatively simple, quite obvious and inexpensive means:

- Turn off unnecessary lights.
- Reduce the use of heating and air conditioning.
- Re-schedule extra-curricular activities from night to afternoon.
- Establish car pools and tune vehicle motors for optimal performance.
- Adjust oil burners for proper combusion level.
- Double up on staff travel and re-examine travel schedules so that the most fuel conserving methods of travel are utilized. Or, to go back to a World War II slogan, "Is this trip really necessary?"

The possibility exists that if measures toward conservation of energy are not developed and enforced within the framework of our educational system, other agencies of government will develop and enforce standards which could result in serious curtailment of school, college and university operations.

My staff is at the ready and on stand-by to provide any assistance you may need in implementing these conservation measures.

With your voluntary cooperation and implementation of the following suggestions, the impact of this energy crisis can be blunted. I encourage your adoption of these and any other measures necessary to reduce fuel and electric power consumption.

PLANT OPERATION

- Turn off lights in rooms when not occupied during class hours. Reduce corridor lighting to the minimum necessary for safety.
- Set thermostats to a level no higher or lower than necessary for health and comfort. This may mean that many students and faculty members will wear sweaters inside buildings.
- Eliminate all unnecessary and decorative outside lighting.
- Heating systems should be checked on a regular basis for combustion efficiency. This means giving special attention to changing filters in the air handling systems in accordance with the manufacturer's recommendations and removing scale in boilers.
- Keep windows and doors closed while heating the buildings.
- Seal off unused rooms and close heating vents.
- Turn off lights on clear days in buildings with a sufficient amount of glass which can emit the needed amount of natural, non-glare light.
- Re-schedule night functions in buildings, eliminate non-instructional night time activities and re-evaluate use of buildings by non-educational groups at night and on weekends.
- Re-examine the use of night security lights, internal and external, reducing illumination where possible.
- Repair leaking hot water faucets, thus conserving two resources at one time.

- Review levels of light illumination to insure that the minimum number of foot candles only are being provided in instructional areas.

- Reduce the number of hours devoted to night time custodial cleaning programs.

TRANSPORTATION

- School districts should order school bus drivers not to exceed a maximum speed of 40 m.p.h. regardless of the type of highway or trip.

- Local districts should use school buses only for home-school/school-home transportation. This would mean that all extra-curricular trips, not deemed essential, would be eliminated.

- School districts should set up refresher training sessions for school bus drivers, providing instruction on maximum speed, rate of acceleration from stops and mechanical condition of buses. These refresher sessions should be taught by local transportation supervisors or garage foremen.

- Garage mechanics should give extra and immediate attention to tuning motors of buses to maintain maximum efficiency.

- Consolidate passenger stops, where safety permits, and reduce the number of bus stops.

- Carefully study student passenger loads to see if a smaller bus may replace a larger bus.

- Study route plans to determine if empty bus miles can be reduced.

APPENDIX

FUEL CONSERVATION GUIDELINES FOR SCHOOL BUILDINGS STATE OF MINNESOTA

Reproduced by permission of F. D. Bright, Deputy Commissioner, Minnesota State Department of Education

NOTICE TO ALL MINNESOTA SCHOOL DISTRICTS

Some school districts will run short of fuel this year and since each building is a unique system, each school district must immediately begin developing a plan for conserving fuel and in the event of complete fuel exhaustion a plan for building "shutdown." The building design architect and engineers should be contacted for a building "shutdown" and "startup" procedures list. These recommended procedures can be assigned to qualified district personnel or contractors familiar with the systems in the event of fuel exhaustion. A plan for protection of building contents from the effects of reduced temperatures must be included as well.

Three basic strategies are suggested.

A. FUEL CONSERVATION TO LOWER THE TOTAL FUEL DEMAND IN COLD WEATHER

1. Ask building occupants to wear warm clothing and reduce the building operating temperatures as follows:

   Occupied areas - 68°F
   Auditorium - 68°F Occupied - 50°F Unoccupied
   Cafeteria kitchen - 65°F - Dry Food Storage - 40°F
   Gymnasium - 60°F Occupied - 50°F Unoccupied
   Locker and Shower Rooms - 68°F
   Basket and Drying Rooms - 40°F
   Shops - 60°F
   Swimming Pool Room - 70°F - Water - 75°F
   Lavatories, Hall and Corridors - 50°F

NOTE: If your fuel oil suppliers cannot deliver fuel when needed, serious consideration should be given to dismissing school and reducing building temperatures to a safe minimum point (see B), which would prevent freeze-ups of heating and water systems rather than conduct classes in the hopes that fuel supplies might be replenished.

2. Ask building occupants to avoid introduction of cold air by opening windows or holding doors open and set all outside air intakes to take a minimum of cold air or cycle them periodically as required.

3. Ask building occupants to avoid use of all power exhausts during cold weather by scheduling educational experiences considering the weather and provide a minimal building exhaust by lowering power settings or periodic cycling of exhaust air handling equipment.

4. Ask building occupants to prudently use electricity and lighting and constantly check the building for wasted electrical energy use.

5. Ask building occupants to use hot water sparingly and set potable hot water to 130°F.

6. Ask building occupants to report drafts and other wasted energy. Seal and insulate where feasible.

7. Increase attention to (and expenditures for) building systems maintenance! (e.g. clean filters, lubricate fans, check steam pipes, damper controls, etc. to improve the efficiency of fuel use.)

8. Implement "shutdown" procedures in unused spaces when feasible.

9. Close school before all fuel is exhausted to avoid the problems of a complete building "shutdown" by implementing strategy B.

B. CLOSE SCHOOL WHILE MAINTAINING INSIDE TEMPERATURES ABOVE FREEZING.

1. Reduce building temperatures to a reasonable minimum (e.g. 40°F).

2. Seal all outside air intakes (e.g. taped polyethlene covers on all unit ventilator intakes, roof intakes, etc.).

3. Seal all exhaust openings (e.g. cover all roof exhausts and damper units similar to #2.)

4. Heat building by cycling the system if the controls cannot be set to a low minimum temperature such as 40°F. Maintain temperatures throughout the building above freezing!

5. Do not heat domestic potable hot water but <u>do</u> operate continuously the domestic water circulating pumps.

6. Open all access panels (and selected ceiling panels), doors, and cabinet doors to minimize the possibility of freeze-ups in enclosed spaces.

7. Provide for continuous monitoring of temperatures throughout the building during subfreezing outside air temperatures by keeping maintenance personnel in the building 24 hours a day.

C. IMPLEMENT COMPLETE "SHUTDOWN" PROCEDURES PRIOR TO COMPLETE FUEL EXHAUSTION IN SUCH A WAY AS TO MINIMIZE DAMAGE TO THE BUILDING AND CONTENTS.

1. A complete building "shutdown" procedures list will be sent to each district only as a backup to the recommendations of the building design engineers recommended "shutdown" procedures.

Questions concerning this notice and the checklist to follow should be directed to Mr. William Lavelle, Assistant Director for Operations, telephone: (612) 296-2288.

C. EXHAUSTED FUEL SUPPLY: FUEL UNAVAILABLE TO PREVENT FREEZE-UPS IN FACILITIES
BUILDING "SHUT-DOWN"
SYSTEMS CHECKLIST
(VERIFY WITH DESIGN ARCHITECT & ENGINEERS)

1. Boiler (Steam Boiler)
   (a) Drain boiler and vent to atmosphere
2. Condensate-Vacuum Pump
   (a) Run pump on vacuum for an extended period to evacuate as much water as possible from return lines to pump. (Waste condensate to floor drain, not to boiler.)
   (b) Disassemble piping at union nearest condensate -- vacuum pump
   (c) Drain condensate receiver tank and remove drain plug at bottom of receiver
3. Condensate Pump
   (a) Repeat steps (2b) and (2c)
   (b) Pump out receivers of pitted pumps and underground condensate lines
4. Auxiliary Heating Equipment
   (a) Fuel oil heaters
   (b) Hot water coils
   (c) Converters
   (d) Hot water storage tanks
   (e) Gas/oil water heaters
   (f) Float and thermostatic traps
      (1) (a) through (e) disassemble waterside piping at union, drain equipment, and remove drain plug where applicable
5. Air Compressor, Air Dryer, Oil Filter
   (a) Shut off electric power
   (b) Drain to remove entrained water
6. Floor Drains (Boiler rm., mechanical rms., rest rms., cafeteria, kitchen, shower rms., etc.
   (a) Use plunger to evacuate water from trap
   (b) Fill traps with antifreeze solution (20% Glycol - 80% Water)
7. Hot Water Heating Boiler, Hot Water Heating Systems, Potable and Chilled Water Systems

   The advice of the mechanical engineer who designed the water systems (potable, chilled water and hot water heating systems) should be followed in the draining of these systems.

   Gas or oil fired furnaces or hot water heaters (where applicable) shut down according to manufacturers direction.

   (a) A possible alternative to draining the hot water heating system would be to introduce an antifreeze solution into the system. CAUTION: Antifreeze solution must not under any circumstances be introduced into the domestic water system because of its toxic effect.
   (b) If it is decided not to drain the water systems, frequent checks daily are necessary to insure that the pumps are functioning and circulating water throughout the system.
   (c) All control valves on radiation and coils should be positioned to insure full flow through radiation and coils. All fresh air and exhaust dampers must be completely closed.

8. Hot Water Heating System (Draining System)
   (a) Hot Water Boiler
      (1) Shut off feed water
      (2) Drain boiler
      (3) Break unions in piping to facilitate drainage
   (b) Primary Pumps
      (1) Drain plug removed from pump housing
      (2) Break union to promote drainage
   (c) Converters
      (1) Remove from piping system and invert to facilitate drainage of "u" bends in coil
   (d) Stainers (Upstream of control valves)
      (1) Remove plug for drainage
   (e) Piping
      (1) Check drain valves for drainage
   (f) Trapped Portions of Piping (Primary and Secondary System)
      Select one or more options:
      (1) Blow out with compressed air
      (2) Drill hole in piping, tap hole for insertion of drain plug before filling system. (Where accessible.)
   (g) Secondary Pumps
      (See 8(b) - Hot water heating system
   (h) Hot Water Heating Coils (Radiation, convectors, central systems, univents)
      (1) Remove plug in stainer upstream of control valve
      (2) Break union in piping
      (3) Remove drain plub in coil
      (4) Remove air vent in coil
   (i) Expansion Tank
      (1) Drain
9. Potable Water Systems (Draining System)
   (a) Shut off water supply to building at water meter
      (1) Protect water meter from freeze damage by removal of drain plug at base of meter
   (b) Open all cold and hot water faucets throughout building and keep open to aid drainage
   (c) Drain hot water storage tank
   (d) Blow out with compressed air all trapped portions of the piping system
   (e) Open drain valves in low spots of piping system
   (f) See 8(f)
   (g) Prop all doors to lavatories, pipe chases, cabinet sinks, and all rooms containing potable water systems
   (h) Remove portions of ceiling tiles to equalize temperatures
   (i) Sinks, water closets, urinals
      (1) Remove water from traps and fill traps with antifreeze solution (20% Glycol - 80% Water)
10. Chilled Water Systems
   (a) Under supervision of design engineer or refrigeration service organization complete draining of chilled water piping e.g.
      (1) Refrigeration equipment
      (2) Refrigeration equipment pump down
      (3) Cooling tower circuit

11. Steam Heating Coils (Radiation, Convectors, Central Systems, Univents)
    (a) Steam traps -- disassemble and remove trap element to facilitate drainage
    (b) Remove drain plug from heating coils
    (c) Remove plug in strainer ahead of heating coil valve
12. Swimming Pool
    (a) Drain pool slowly when pool water reaches 35°F.
    (b) Protect all drains as previously mentioned. See 6
    (c) Protect pool water heaters the same as converters or heat exchangers
    (d) Drain filter tank
    (e) Drain chlorine and soda ash barrels
    (f) Protect untrapped drains (e.g., scum gutters) as mentioned in 8(f),(2).
    (g) Drain all strainers
13. Footings - Rooms with footings directly below floor e.g., basement rms., and single floor buildings could give problems - attempt to keep above 32°F.
14. Fire Protection Equipment Systems (Piping and Ancillary Equipment)
    (a) Sprinkler systems (wet pipe)
    (b) Piping systems (wet pipe) (e.g., standpipe and hoses)
    (c) Fire Extinguishers
    (d) Fire Insurance Company
        (a) & (b) If freezing conditions within the facility indicate that the fire suppression piping system will be damaged if the systems are not drained, permission must be obtained from the state fire marshall or local fire authorities to drain system
        (c) Fire Extinguishers
            (1) Have fire extinguishers serviced to insure an operable state in freezing temperatures
        (d) Fire Insurance Company
            (1) Notify fire insurance company if fire protection systems are to be drained
            (2) Check Insurance Coverage

SYSTEM CHECKLIST SPECIALIZED EQUIPMENT - EXAMPLES

1. Gas and Gas/oil Burners (heating boilers)
   (a) Follow instructions of gas/oil burner service organization, particularly instructions especially relating to flame safeguard equipment, and specialized valves, e.g., hydromotors.
2. Water Softeners (boilers and potable water) Drain
3. Refrigerators, Walk-in Coolers, Freezers, Milk Coolers (cafeteria, kitchen, home ec room, etc.)
   (a) Empty contents
   (b) Prop open doors
   (c) Shut down procedures as directed by refrigeration service organization
4. Water Coolers
   (a) Cut electric power and drain
5. Dishwashers, Steam Kettles, Steam Boilers, Garbage Disposals (cafeteria, kitchen, home ec) Drain Equipment
6. Fresh Foods and Other Perishable Items of Food - Store in Safe Area
7. Booster Hot Water Heaters (cafeteria, showers, phys. ed.) - Drain as outlined for converters 8(c),(1)

8. Musical Instruments (Protect from freezing)
   (a) Woodwind Instruments
   (b) String Instruments
   (c) The combination of changes in humidity and freezing temperatures will cause woodwind instruments to crack
9. Electronic and AV Equipment (Protect from freezing)
   In general, any audio-visual equipment subjected to freezing should be allowed to warm up to room temperature before using. (12 to 24 hours, depending upon size and enclosure)
   In case of equipment with cooling fans, servo units, and friction drive belts, the drive mechanisms should be checked for sticking -- and belts for cracking.
   Special care should be exercised with video tape recorders, as the heads (particularly on older units) become brittle in cold temperatures.
   In addition, audio-visual materials such as films, filmstrips, audio and visual tapes, etc., should also be allowed to warm up to room temperature before using.
10. Business and Office Equipment Machines (Check with supplier)
11. Fire Extinguishers (Protect from freezing)
12. Chemicals, Paints, Varnishes (Protect from freezing)
13. Clocks - Building System Clocks - Turn off electricity to system to prevent damage
14. Science Center - plants, laboratory animals, chemicals - Protect from freezing
15. Air Compressors
    (a) Shut off electric power
    (b) Drain storage tank
16. Art Equipment and Supplies (Protect from freezing)
    (a) Sinks with clay traps
    (b) Liquid tempra
    (c) Acrylic artists colors
    (d) Glue and paste
    (e) Some supplies in aerosol cans
    (f) Natural clay requires extended time to thaw out
    (g) Clay work in progress could split and crack
    (h) Clay in containers could split open packaging

This list is an attempt to alert personnel responsible that many items are in need of protection from freezing. It is suggested that the building inventory be checked for additional items that can be added to this list.

CAUTION: The police and fire authorities should be notified of building shut down to cooperate with school authorities to reduce vandalism.

SUPPLIES PROTECTION FROM FREEZING TEMPERATURES

Acids	Bug sprays	Developers, photo	Liquid polish
Ammonia	Caulking compounds	Disinfectants	Liquid soap
Antiseptics	Caustics, liquid	Distilled water	paints
Art Paints	Cement, construction	Drain cleaner	Shellac
Baking Powder	Cement, liquid	Electric components	Thermometers
Baking Soda	Chemicals	Electronic tubes	Thinners
Batteries, electric	Clay	Enamel	Varnish removers
Belt dressings	Cleaning compounds	Eradicator inks	Waxes, floor
Biology specimens	Compounds, chemicals	Glue	finishes
Boiler compounds	Compounds, patching	Insecticides	
Brass polishes	Correction fluid, stencil	Lacquers	

APPENDIX

(SAMPLE - NONTECHNICAL)

BASIS FOR COMPUTING DEGREE HOUR REQUIREMENTS
STATE OF MICHIGAN
Reproduced by permission of Philip Kearney, Associate Superintendent
Michigan State Department of Education

In order to determine the relative fuel savings that would be achieved under any one of the several heating alternatives presented, one must compare the change in temperature required times the number of hours the change is desired for any given alternative compared to another. This figure is defined as "degree hours required" and is computed by utilizing the following formula:

$$DHR = (t_i - t_o \text{ x hrs}), + (t_i - t_o \text{ x hrs}) + \ldots$$

Where: DHR = Degree hours required
t_i = Minimum inside temperature desired
t_o = Average outside temperature

Thus, if the average outside temperature for a given calendar week is 20°F and you wish to maintain a minimum inside temperature of 68°F for eight hours a day for five days, and 60°F for the remainder of the hours in that week, the computation would be as follows:

$$DHR = (68^\circ - 20^\circ \text{ x } 40 \text{ hrs}) + (60^\circ - 20^\circ \text{ x } 128 \text{ hrs})$$

$$= (48^\circ \text{ x } 40 \text{ hrs}) + (40^\circ \text{ x } 128 \text{ hrs})$$

$$= 1{,}920 + 5{,}120$$

$$= 7{,}040 \text{ degree hours required}$$

Thus, the three important terms in the formula are: (1) The average outside temperature; (2) the minimum inside temperature desired; and (3) the number of hours any given minimum inside temperature is desired. The first term is outside man's control, but can be reasonably estimated from past experience. Short of an unseasonably warm winter (or cold winter), fuel savings will be largely dependent on manipulation of the second and third terms in the formula. The alternatives presented reflect differing manipulations of these two terms.

The first term, the average outside temperature, remains constant for any given month in the several alternatives. The figures used are given below and were derived from data provided by the Environmental Data Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce. These average monthly temperatures were calculated by taking the monthly averages for the past thirty years for each of Michigan's ten weather regions or divisions, computing 30-year monthly averages for each division, and then computing state monthly averages. The averages used are as follows:

September	60°F	February	22°F
October	50°F	March	30°F
November	37°F	April	44°F
December	25°F	May	54°F
January	20°F	June	64°F

In calculating percentage of fuel savings, the divisor remained constant at 144,256 degree hours required. This figure represented the degree hours required for heat at "normal levels" for the entire 1973-74 school year. Normal levels are defined as:

(a) 40 hours of 68°F per week
128 hours of 60°F per week
for 36 weeks

(b) 168 hours of 60°F per week
for 4 weeks

It should be recognized that past degree hour requirements undoubtedly exceeded this figure of 144,256 DHR, since most schools would be heating at the 72°- 74°F range during instructional hours and dropping to temperatures somewhere above 60°F for noninstructional hours, perhaps in the neighborhood of 65°- 68°F. In effect, then, the 144,256 DHR already reflects voluntary conservation measures undertaken by all schools. It is estimated that these voluntary measures would produce in the neighborhood of a 5% fuel savings. To the extent that this is true, the fuel savings projected under each of the alternatives is an overestimate of total fuel savings.

For those districts wishing to refine these estimates (for example) due to average temperatures in their region higher or lower than the estimated state average), they may contact Dr. Philip Kearney, Department of Education, (517) 373-3909.

PREPARED STATEMENT OF DR. JOHN G. DRISCOLL, PRESIDENT OF IONA COLLEGE

I am Doctor John G. Driscoll, President of Iona College. It is an honor to be able to present testimony to this distinguished subcommittee which has worked so tirelessly and diligently to ensure the well being of American higher education. The dedication and concern of the subcommittee members gives great encouragement to us all.

As is the case with all American colleges and universities today, Iona faces a number of problems with respect to the current energy crisis. Founded in 1940 in New Rochelle, part of New York State's Westchester County, it is one of a number of institutions of higher learning which found it most advantageous to locate at the interface of a major metropolitan center. Over the years, this decision has proven wise. However, Iona, and similar colleges and universities, now face problems which set them apart from their counterparts. Unlike urban institutions, they often have no well-developed mass transit system and, unlike exurban institutions, few or no residential facilities. Members of metropolitan perimeter college communities have always had to depend predominantly upon the use of the automobile. Until now, this has nevery posed a problem and, as I have indicated, these same metropolitan perimeter colleges have done quite well under this arrangement, due, in no small part, to the existence of excellent highway systems. Unfortunately, the current situation threatens to change that, change it to an extent as yet impossible to determine. Iona's case may well serve as an example of what these institutions face. At the current time, 80 percent of Iona's total day undergraduate enrollment of 2600 relies on some form of transportation to reach the campus, representing, 80 percent of its male students, 77 percent of its female students. The other 20 percent reside either in dormitories (6.5 percent, 6 percent of them men at Iona's one residence

hall, 7 percent women at the neighboring College of New Rochelle) or in rooms rented in apartments or private houses within the immediate vicinity of the college (15 percent men, 16 percent women). None of the students who attend either the evening school (248), the general studies program (191) or one of the three graduate programs (1096) board. As is the case with the majority of the undergraduate day students, they commute to the campus, primarily by means of the automobile.

This latter fact is prompted in no small measure by the fact that Westchester County possesses no truly developed system of mass transportation, either in its own right or that links up with mass transit systems within the other parts of the Metropolitan Area. Of our total student enrollment of 4059, 92 percent live within areas accessible to Iona by automobile. Fully 52 percent come from the Westchester Area itself, 21 percent from the neighboring Bronx, .07 percent from Queens, .04 percent from Rockland County, .03 percent from Manhattan, .02 percent from Nassau, .01 percent from Brooklyn, .01 percent from Suffolk, .01 percent from Orange County, and .01 percent from Putnam County.

This fact becomes more telling when one considers that 38 percent of our total enrollment consists of students who, because of the peculiarities of their programs, or because of business and familial obligations, would not be able to board even if accommodations were available which, for the most part, they are not.

Technically, as I have stated, Iona College is conveniently located. This, however, is gauged with respect to automobile transportation. When judged on the basis of a mass transportation system it is not. Even a simple trip

from a neighboring city such as Yonkers or White Plains, a matter of 10 or 15 automobile minutes, becomes transformed into a complex system of public transportation linkages involving an hour, and often many hours, of time. Such a complex structure, when it exists at all, becomes a matter of great tribulation to all those members of the Iona community whose academic life-styles are based on variable daily schedules non-conducive to intricate intermeshing with the few available means at hand. Westchester is currently engaged in actively studying the mass transportation needs as they exist in the County. Our new County Executive Alfred DelBello has delineated this as a matter of the utmost urgency. However, Iona is still faced with the question of what to do during the period linking the start of the study and the completion of its proposals: our problem is the present and while this problem is not paralyzing us, it is certainly slowing us down.

One possible solution to help alleviate part of the situation at hand comes immediately to mind - the use of car pools. Iona College has taken a number of steps to investigate this possibility. Polls were run in the atudent newspaper to help define common embarkation points whereby a sizeable number of students could be served by some facet of a targeted mass transit service under which could be included a form of car pooling. Indicated were such areas as the Pelham Bay, 214st Street, Woodlawn, and Van Cortlandt Stations of the IRT and the A nd D stops of the Independent Subway line. Investigations, still underway, were initiated to see if the County could extend regular bus service to such points.

The Iona College Administration has contacted the Westchester County Planning Office to inquire about staging areas for the formation of car

pools. The Planning Office reported that it had no such information available. The Department of Public Works of Westchester County was approached with the same inquiry and it informed the college that no car pools currently exist in Westchester County and that their existence was not foreseen in the near future.

Iona has also contacted a representative of the Westchester County Executive's Office charged with studying the traffic and parking problems within the County. While this study does not specifically include car pooling he asked that the names, addresses, and zip codes of all Iona students residing in Westchester County be sent to him, an action taken by the college. Hopefully, this might lead to the germ of a program. Iona is continuing to work with the County, trying to arrive at a means to help counteract the transportation problems caused by the energy crisis through some type of car pooling system. In addition, the college has requested a copy of the "Operation Energy Package" -- a system for developing computerized car pools made available to nonprofit institutions by the Burroughs Corporation of New York City. When this package is received, a study will be made by the Computing Center of the college to determine the feasibility of implementation. Meanwhile, the Dean of Students has been working with undergraduates on a make-shift pooling system to immediately address the situation.

However, with respect to car pooling, the matter of flexible scheduling again enters the picture. While this type of system might work quite effectively for those persons in occupations with set time demands, it can cause grave problems for large numbers of persons with highly individualistic exigencies.

57-763 O - 74 - 19

This particular consideration is intensified by the fact that approximately 80 percent of our students currently enrolled in the undergraduate day session and who commute to the campus hold some type of daily employment to help defray their educational expenses. The same concerns which make the use of complex mass transit facilities impractical -- matching the demands of a college education with the demands of a form of occupation necessary for the attainment of that education -- also are at work with respect to car pooling. While an ineffective mass transit system is inflexible by virtue of its unreliability, a car pooling system, with its inherent rigid structure with respect to departure times, is equally inflexible and equally unsuitable for the satisfaction of student needs. Only the automobile, at the present time, affords the opportunity to meet both demands without an unfair and unwarranted strain of burden. Should such a strain continue to be imposed, and in fact be intensified, students may well be forced to leave Iona for another college or university or, in fact, to abandon the quest for higher education altogether.

The same need for flexibility reappears in the case of evening or graduate students who must face the problem of returning home during the late hours after class. Often these students must also consider prolonging their stay at the college to utilize the library facilities. If a mass transit system is not available at odd hours, if a mass transit system is not fast and efficient, or, indeed, if a mass transit system does not exist at all, either in fact or in effect, one must utilize an automobile. If this option is constrained or denied, then, as is the case with the day undergraduate student, a person in such a position must either transfer or drop out. Here, too, car pooling would deny this person flexibility so desperately needed.

This need for flexibility cannot be overemphasized -- it is the key to the existence and growth of any institution of higher education. Without benefit of residential faciltiies and without benefit of mass transit, Iona has always had to look to the automobile to ensure this flexibility. In keeping with this, the college opened, in November 1973, a new multi-tiered on-site parking facility to accommodate over 700 automobiles, assuming in turn a great financial burden, a burden borne of necessity by Iona's dependence on these same automobiles. To the extent that the current energy problems threaten the use of this particular mode of transportation, they treaten the college itself and all those who have chosen to become part of the college. Not the least to suffer is the surrounding community which has always drawn upon Iona's many resources, including its students, undergraduate and graduate, to guarantee its own existence and growth. Indeed, while Iona is, on one hand, an educational institution, it is, on the other hand, a major $9 million business, vital to the community of which it is a part. Some 5000 people are engaged in numerous activities on the campus on an around-the-clock basis. These same people generate a tremendous amount of income within the community. Further, our guidance and services, which we readily supply, are sought by our neighbors. We like to feel that we help our community, that we help Westchester, giving both service and revenue. It dismays us that the energy problems could well impinge upon contributions in both of these areas.

Iona has done much to try and cope with the energy crisis within its own boundaries. Committees have been formed to examine all phases of the situation and to come up with viable solutions. Guidelines, consistent with government directives, have been followed and even more stringent ones imposed. One example of this is a detailed two-phase

plan drawn up to conserve every ounce of energy available on campus. New alternatives to the traditional college calendar are being actively explored; some have already been implemented. Next year, for example, it will be possible for our students to arrange programs that will require them to be on campus only four days instead of five. Still, even within our own boundaries, the energy problem inevitably intrudes. It is difficult for us to properly fulfill our campus maintenance programs for our vehicles and our equipment require gasoline. The construction of much-needed new instructional space, now underway, suffers in accordance with the energy and transportation problems faced by our contractors and by the workers themselves. Though matters are difficult, we persevere. More changes will come for the planning for energy conservation is, and must continue to be, a constant part of the day-to-day and long-range operations of the college. Still, we need help, and we need it soon.

Iona, and colleges and universities like it, are not isolated, are not self-dependent. Their good efforts must be matched with equally good efforts from outside; their good intentions must interact with the good intentions of the others upon whom they depend, and who, in truth, depend so much on them. The energy crisis which could befall the country will be far more fearful should a major segment of higher education -- the metropolitan perimeter colleges -- be allowed to suffer severely under this current yoke. If we stand in the slightest danger of losing the energies of our students by limiting their options, we stand in the gravest of all dangers. We must work hard to resolve our current problems to guard against this possibility ever occurring.

ab/F3/1-7

MONTGOMERY PUBLIC SCHOOLS
CITY AND COUNTY
BOX 1991
MONTGOMERY, ALABAMA 36104

SUPERINTENDENT'S OFFICE

December 18, 1973

Senator Claiborne Pell
United States Senate
Education Subcommittee
Washington, D. C.

Dear Senator Pell:

I was most interested to hear that you had scheduled a public hearing to determine the impact of the energy crisis on education. As Superintendent of the Montgomery Public Schools, City and County, I have spent a disproportionate amount of my time since October, 1973 trying to obtain gasoline to operate school buses. This system has a student enrollment of 36,873 of which 13,009 are transported. The system does operate under a Federal court order, however, busing has not been a major factor up to the present time. The county is composed of 790 square miles (with a length North-to-South of 37 miles and East-to-West of 33 miles). The population according to the 1970 census for the City of Montgomery was 133,386 and for the city and county 167,790. The 34,404 people located outside the city limits are sparsely settled over the county. It has always been necessary to operate a large pupil transportation fleet in Montgomery County dating from 1918 until the present time. The system employs 156 bus drivers and during the school year 1972-73 the buses ran 1,237,247 miles. It is necessary to purchase approximately 40,570 gallons of gasoline per month. A bus travels at approximately 4½ miles per gallon with an average cost during the school year of .50 per mile, with a total cost of $613,499.25 for the 1972-73 school year when gasoline was costing the system nineteen cents per gallon.

Senator Pell, it was my understanding that a volunteer system agreed upon by the oil companies was to supply gasoline to school systems on a base year period. <u>This system has not worked!</u> I am having to obtain gasoline from every source possible and at retail prices. In November of 1972, the system paid nineteen cents per gallon and in November of 1973 the cost was as high as forty-seven cents per gallon. This additional cost could increase the transportation budget by $120,000.00. This is added cost that the system cannot afford. The local effort provided by Montgomery County is a seven mill property tax and a one cent per gallon gasoline tax. The revenue from this one cent per gallon has been descending from $108,960.31 in September, 1973 to $93,092.27 in October, 1973, a deficiency of $15,868.04. This crisis which is producing less local support and adding to the total cost of transporting is having a direct effect on the education system. Frankly, I do not know how this system can absorb this additional cost.

The effect of not knowing from week-to-week or day-to-day whether the transportation system can operate has kept a number of staff members working constantly on obtaining gasoline. I feel that I have a moral obligation to the 136 bus drivers as well as to the school children. Most of these drivers make from two to three runs per day at some personal sacrifice to themselves since most of these drivers could secure higher paying jobs.

Should it become necessary to stop the buses it is my belief that 9,000 of the 13,009 transported children could not attend school. This would drastically curtail their education process causing many to never return to school. This move would financially wreck the system since state aid is allocated on an average daily attendance basis.

The combined problem of operating a school system under a Federal court order, the refusal of the local people to raise local support and the added gasoline problem has made it impossible to do educational planning past a short time. I trust that strong Federal regulation would be forthcoming which in effect would mandate the sale of gasoline for public school transportation at a reasonable wholesale bulk lot price.

These are a few of our present problems connected with the energy crisis which I wish to share with you. Should you think it necessary, I would share this and further information with the members of the committee. I am pleased that you are looking into the disastrous effect the energy crisis is having on education.

Sincerely,

W. S. Garrett

W. S. Garrett, Superintendent
Montgomery Public Schools
City and County
Box 1991
Montgomery, Alabama
205/ 269-9111

cc: Senator John Sparkman
Senator James Allen

WSG/fw

MONTGOMERY PUBLIC SCHOOLS
CITY AND COUNTY
BOX 1991
MONTGOMERY, ALABAMA 36103

SUPERINTENDENT'S OFFICE

December 21, 1973

Senate-Sub-Committee on Education
Room 423
Dirksen Senate Building
Washington, D. C.

Dear Sirs:

I am most interested to hear that you are looking into the energy crisis as it affects public schools. As Superintendent of the Montgomery Public Schools, City and County, I have spent a disproportionate amount of my time since October, 1973 trying to obtain gasoline to operate school buses. This system has a student enrollment of 36,873 of which 13,009 are transported. The system does operate under a Federal court order, however, busing has not been a major factor up to the present time. The county is composed of 790 square miles (with a length North-to-South of 37 miles and East-to-West of 33 miles). The population according to the 1970 census for the City of Montgomery was 133,386 and for the city and county 167,790. The 34,404 people located outside the city limits are sparsely settled over the county. It has always been necessary to operate a large pupil transportation fleet in Montgomery County dating from 1918 until the present time. The system employs 156 bus drivers and during the school year 1972-73 the buses ran 1,237,247 miles. It is necessary to purchase approximately 40,570 gallons of gasoline per month. A bus travels at approximately 4½ miles per gallon with an average cost during the school year of .50 per mile, with a total cost of $613,499.25 for the 1972-73 school year when gasoline was costing the system nineteen cents per gallon.

It was my understanding that a volunteer system agreed upon by the oil companies was to supply gasoline to school systems on a base year period. <u>This system has not worked!</u> I am having to obtain gasoline from every source possible and at retail prices. In November of 1972, the system paid nineteen cents per gallon and in November of 1973 the cost was as high as forty-seven cents per gallon. This additional cost could increase the transportation budget by $120,000.00. This is added cost that the system cannot afford. The local effort provided by Montgomery County is a seven mill property tax and a one cent per gallon gasoline tax. The revenue from this one cent per gallon gasoline tax. The revenue from this one cent per gallon has been descending from $108,960.31 in September, 1973 to $93,092.27 in October, 1973, a deficiency of $15,868.04. This crisis which is producing less local support and adding to the total cost of transporting is having a direct effect on the education system. Frankly, I do not know how this system can absorb this additional cost.

The effect of not knowing from week-to-week or day-to-day whether the transportation system can operate has kept a number of staff members working constantly on obtaining gasoline. I feel that I have a moral obligation to the 156 bus drivers as well as to the school children. Most of these drivers make from two to three runs per day at some personal sacrifice to themselves since most of these drivers could secure higher paying jobs.

Should it become necessary to stop the buses it is my belief that 9,000 of the 13,000 transported children could not attend school. This would drastically curtail their education process causing many to never to return to school. This move would financially wreck the system since state aid is allocated on an average daily attendance basis.

The combined problem of operating a school system under a Federal court order, the refusal of the local people to raise local support and the added gasoline problem has made it impossible to do educational planning past a short time. I trust that strong Federal regulation would be forthcoming which in effect would mandate the sale of gasoline for public school transportation at a reasonable wholesale bulk lot price.

These are a few of our present problems connected with the energy crisis which I wish to share with you. Should you think it necessary, I would share this and further information with the members of the committee. I am pleased that you are looking into the disastrous effect the energy crisis is having on education.

Sincerely,

W. S. Garrett

W. S. Garrett, Superintendent
Montgomery Public Schools
City and County
Box 1991
Montgomery, Alabama

205/ 269-9111

cc: Senator John Sparkman
Senator James Allen

State of Alabama
Department of Education
State Office Building
Montgomery, Alabama 36104

LeRoy Brown
State Superintendent of Education

December 28, 1973

Mrs. Jean Frohlicher
Room 4230
Dirkson Office Building
Washington, D. C. 20510

Dear Mrs. Frohlicher:

A letter went out from the office of Dr. LeRoy Brown, State Superintendent of Education, to each county and city superintendent in Alabama on December 10, 1973, urging each school system to conserve fuel. At this time a study of each local situation was recommended, as well as a number of items for consideration during the energy crisis.

On December 21, 1973, a survey form regarding the energy crisis was mailed to each of the 126 public school systems in Alabama. Preliminary returns on this survey indicate the following:

1. Those schools using oil and liquefied gas have insufficient supplies for heating. There has been a lack of firm bids as well as increased cost for all heating fuels.

2. A number of school systems have major problems due to lack of gasoline for transportation services. Gasoline supplies have been reduced from ten to fifteen per cent this school year. Current cost of gasoline has increased approximately ten cents per gallon. In many cases, school systems are unable to get bids.

3. A number of procedures are in operation by school systems to conserve fuel; such as, reduced thermostat settings, changes in bus routes, class instruction, car pools, curtailed field trips, etc.

We hope this information concerning the effect of the energy crisis on Alabama schools will be helpful in your hearing on January 7, 1974.

Sincerely yours,

W. H. Kimbrough

W. H. Kimbrough, Director
Division of Administration and Finance

WHK/ld

western union **Telegram**

NAJ013(2058)(2-248605E007)PD 01/07/74 2058

ICS IPMBNGZ CSP

2142628854 POM TDBN GRAND PRAIRIE TX 14 01-07 0858P EDT

PMS SENATOR CLAIBORNE PELL

CAPITOL HILL DC 20510

DISAGREE WITH JOHN C SAWHILL ENTIRELY--FORCED BUSING WASTING MILLIONS OF GALLONS OF FUEL

THOMAS J PARRILL 1617 CLIFTON COURT GRAND PRAIRIE TEXAS 75050

NNNN

Steve
FYI

286

1617 Clifton Ct.
Grand Prairie, Tx.
Jan. 14, 1974

Sen. Claiborne Pell,
Chairman, Subcommittee
on Education, U. S.
Senate, Committee

Dear Sen. Claiborne:

In response to your letter of Jan. 9, I have no access to numerical data as factual data since I am in no way connected with either the oil industry or the government. However, I do enclose a clipping from a local paper in which Senator Helms of North Carolina estimates his state consumes an extra 30 million gallons and Senator Bartlett of Oklahoma estimates usage of an extra 350,000 gallons in Oklahoma City alone. Multiply such numbers by every city across the entire 50 states and the figure of forced busing gasoline usage has to be quite large.

That is the kind of fact I think should be considered. It is not a time to save pet projects of those who seem to be more interested in federal programs for the programs sake than anything else. The same article that I enclose notes that while some 88% of the people are opposed to forced busing, it has been literally crammed down our throats by the Supreme Court.

Other programs have also been formulated and carried out which probably would get a resounding rejection if ever voted upon. These might be all the phases of price control. The government quickly gives in to the construction workers unions at the outset of price controls and then tells everyone else that we must abide by the rules.

The rules should apply uniformly to all, but they never do. There is continual favoritism, exceptions and all the rest which scare people on the very kind of government which is supposed to be for all. Would you like one more unrelated example? Currently bills S1040 and S1041 deny us ordinary folks the use of public lands, BUT, satellites are photographing the world and getting data on mineral deposits all over. This is with MY tax dollars, but, someday, some rich and powerful U. S. group of some kind will suddenly have the backing of the government "because it is necessary" to mine, use or otherwise take the minerals in the earth which I am now going to be prohibited from touching.

Somehow, Senator Pell, the bureaucrats in Washington always win. I am not talking about the senators and representatives, but the entrenched, permanent and ever-growing army of bureaucrats who are gradually trying to run every facet of life in the U. S. that there is. The same people who passed a Clean Air Act never had yet the ability after some seven years of trying to establish practical standards for auto engines. If performance is inhibited by 12% in 2 years, this means that engines have to run <u>longer</u> on each trip, thus polluting the air more in the long run with the impractical junk that is now required to foul up millions of gasoline engines.

The easiest method to do this will <u>never</u> be used for one simple reason---it would not take another thousand bureaucrats to manage the program, issue tons of paper work and get this program mired in the usual inefficient mess that is traditionally the way all government programs work out.

Take a look at two industries. One was hamstrung for years by a government agency and a union. The other, free of these two millstones blossomed into the world leader. I'm talking about the sorry railroad industry and the huge U. S. computer industry. Its certainly something to think about.

If we are to have controls, lets control the number of non-productive Government employees, the number of government vehicles, buildings and facilities and the amount of land held by the Government. Lets determine to SAVE money instead of finding endless new programs to hire bureaucrats to spend it on. Huge programs usually turn out worthless. Where is the Department of Transportation in this energy problem. They spend more time seeking headlines and trying to cover themselves with glory than they do anything else. An example? About a year and a half ago they "gave" the new regional airport a facility here some $7.8 million as a grant. This was meaningless as far as this $700 million project was concerned because it was planned and executed long before DOT ever heard about it, but one of the requirements in this grant was that the airport put up a big sign that reads like DOT sponsored this $700 million dollar project all by themselves. And then, this same publicity-conscious government puts out stringet rules and regulations against allowing ADVERTISING expense on Govt. contracts.

Somehow or other, I am not impressed.

Very truly yours,

Thomas J. Parrill
Law-abiding citizen

Failure Of Limited Busing Bill May Shake Public Cooperation

Public observance and cooperation with conservation of gasoline was apparently dealt a severe blow by the failure of the Congress to pass a bill initiated and cosponsored by Congressman Dale Milford of Grand Prairie which would eliminate the usage of fuels for the forced busing of school children.

This is indicated by the results of a year long continuous survey by the National Federation of Independent Business which shows that out of 145,930 respondents 88 per cent are opposed to the forced busing.

While the extra burden on local taxpayers to provide additional buses, drivers and fuel has been a major source of the spoken opposition by the independent business people, the tempo of opposition appears to be stepping up in view of the government pronouncements on the need for conservation of fuel. The NFIB data also indicates fuel restrictions can jump the unemployment rate up to a level of 10 per cent or more.

Early returns from a new Federation survey on the energy situation indicate that while some independent business people feel there is a real problem, there are still many who think the shortage has been contrived and the lack of Congressional action on forced school busing appears to have widened the credibility gap.

From the standpoint of regions, there is little difference in the opinions on this issue In New England 84 per cent express opposition; in the Mid-Atlantic States 91 per cent; the east north central 90 per cent; in the west north central 84 per cent; in the South-Atlantic 93 per cent; in the east south central 97 per cent; in the west south central 94 per cent; in the Mountain States 89 per cent and in the Pacific States 79 per cent.

When the Senate hammered out an energy conservation measure, Senator Jesse Helms of North Carolina introduced an amendment which would have ended forced busing during the energy emergency. The amendment was tabled by a vote of 48 to 39, but a ban on the use of fuels for this purpose given a substantial majority vote in the House bill was eliminated in the Senate-House conference.

However, if early in the year the gasoline shortage worsens, if prices continue to increase, and a drive by local governments to raise property taxes to make up the deficits caused by higher priced gasoline in school budgets, it can be expected that public pressure on the Congress will mount.

When he introduced his amendment Senator Helms said that a spot check in four of his state's school districts showed that before forced busing an average of 943,463 gallons were used, but that in the first year of forced busing this usage was increased by 1,118,908 gallons, or an increase of 218 per cent. He estimated that in the state as a whole the forced busing resulted in the consumption of 30 million gallons of fuel extra.

Senator Dewey Bartlett of Oklahoma says that officials in Oklahoma City claim cross-town busing of students will require an extra 350,460 gallons of fuel.

While no one can predict at what price gasoline will finally reach, in the average school district where busing is in operation, it does not require a substantial increase in operation costs to call for new higher taxes.

Many of the respondents add to the survey volunteer comments. The majority seem to be of the opinion that if the problem is one of balancing out the quality of education, it would be more economical to transfer teachers rather than operating fleets of buses.

Others express the opinion that the quality of education would be best improved by using money spent on busing for better facilities, more instructional materials, and upgrading the teaching personnel.

HARRISON A. WILLIAMS, JR., N.J., CHAIRMAN
JENNINGS RANDOLPH, W. VA.
CLAIBORNE PELL, R.I.
EDWARD M. KENNEDY, MASS.
GAYLORD NELSON, WIS.
WALTER F. MONDALE, MINN.
THOMAS F. EAGLETON, MO.
ALAN CRANSTON, CALIF.
HAROLD E. HUGHES, IOWA
WILLIAM D. HATHAWAY, MAINE
JACOB K. JAVITS, N.Y.
PETER H. DOMINICK, COLO.
RICHARD S. SCHWEIKER, PA.
ROBERT TAFT, JR., OHIO
J. GLENN BEALL, JR., MD.
ROBERT T. STAFFORD, VT.
STEWART E. MCCLURE, STAFF DIRECTOR
ROBERT B. NOBLE, GENERAL COUNSEL

United States Senate
COMMITTEE ON
LABOR AND PUBLIC WELFARE
WASHINGTON, D.C. 20510

January 9, 1974

Mr. Thomas J. Parrill
1617 Clifton Court
Grand Prairie, Texas 75050

Dear Mr. Parrill:

Thank you very much for your recent telegram.

I would be most interested in learning the factual basis for your conclusion that "forced busing wastes millions of gallons of fuel," as well as any research which has been conducted concerning same. With your permission, I would have such information included in the printed hearing record.

Again, thank you for contacting me.

Ever sincerely,

Claiborne Pell

Claiborne Pell
Chairman
Subcommittee on Education

MGMDALT MSA
1-002415U008 01/08/74
ICS MGMNCSA MUCC
01421 MLTN VA
ZIP 75050

western union Mailgram

THOMAS J PARRILL
1617 CLIFTON CT
GRAND PRAIRIE TX 75050

THIS MAILGRAM IS A CONFIRMATION COPY OF THE FOLLOWING MESSAGE:
2142628854 POM TDBN GRAND PRAIRIE TX 14 01-07 0858P EDT
PMS SENATOR CLAIBORNE PELL
CAPITOL HILL DC 20510
DISAGREE WITH JOHN C SANMILL ENTIRELY--FORCED BUSING WASTING
MILLIONS OF GALLONS OF FUEL
THOMAS J PARRILL 1617 CLIFTON COURT GRAND PRAIRIE TEXAS 75050
THIS IS A CONFIRMATION COPY BY MAILGRAM.

18121 EST

MGMDALT MSA

Senator PELL. Thank you very much indeed for being with us.

Dr. SCOTT. Is it now cookies and milk time?

Senator PELL. The subcommittee is recessed, subject to the call of the Chair.

[Whereupon, at 12:30 p.m., the subcommittee recessed, subject to the call of the Chair.]

○